EXACT SCIENCES CORP
Form 10-K
March 15, 2007

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended: December 31, 2006

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number: 000-32179

EXACT SCIENCES CORPORATION

(Exact name of registrant as specified in its charter)

DELAWARE	**02-0478229**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
100 Campus Drive, Marlborough, Massachusetts	**01752**
(Address of principal executive offices)	(zip code)

Registrant s telephone number, including area code: (508) 683-1200

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

Common Stock, $.01 Par Value	The NASDAQ Stock Market LLC

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

None

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

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

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

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

Indicate by checkmark whether or the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o Accelerated filer x Non-accelerated filer o

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No x

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, as of the last business day of the Registrant s most recently completed second fiscal quarter was approximately $52,131,339 (based on the closing price of the Registrant s Common Stock on June 30, 2006 of $2.10 per share).

The number of shares outstanding of the Registrant s $.01 par value Common Stock as of March 9, 2007 was 26,756,918.

DOCUMENT INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days after the end of the fiscal year ended December 31, 2006. Portions of such proxy statement are incorporated by reference into Part III of this Form 10-K.

EXACT SCIENCES CORPORATION

ANNUAL REPORT ON FORM 10-K

YEAR ENDED DECEMBER 31, 2006

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PART I

Item 1. Business

This business section and other parts of this Annual Report on Form 10-K contain forward-looking statements relating to, among other things, our expectations concerning our commercial strategy, our marketing, sales and reimbursement efforts and their likely future success, our research and development efforts, regulatory compliance and the effectiveness and market acceptance of our technologies and LabCorp s PreGen-Plus test. Our forward-looking statements involve risk and uncertainties. Our actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those set forth in Item 1A. Risk Factors and elsewhere in this Form 10-K.

Overview

EXACT Sciences Corporation is an applied genomics company that develops proprietary DNA-based technologies for use in the detection of cancer. We have selected colorectal cancer as the first application of our technologies. We have licensed certain of our patents, on an exclusive basis through August 2008, to Laboratory Corporation of America® Holdings (LabCorp®) in connection with a commercial testing service developed by LabCorp and marketed under the name PreGen-Plus™. LabCorp s sales of PreGen-Plus represent our primary source of revenue.

PreGen-Plus is a non-invasive stool-based DNA testing service for the detection of colorectal cancer in the average-risk population. Colorectal cancer is the second leading cause of cancer death in the U.S. and the leading cause of cancer death among non-smokers. Patients who are diagnosed early in the progression of the disease, however, are more likely to have a complete recovery and to utilize lower levels of expensive medical resources. Accordingly, the American Cancer Society (ACS) recommends that all persons age 50 and above undergo regular colorectal cancer screening. Of the more than 87 million people in the United States for whom colorectal cancer screening is recommended, approximately one-half have never been screened, and a significant portion of the balance have been inadequately screened. We believe that this large population of unscreened patients represents an opportunity to reduce the mortality associated with colorectal cancer.

Today, professional guidelines, including those of the ACS, the American College of Gastroenterology, and the American Gastroenterological Association, recommend regular screening by a variety of methods including colonoscopy, flexible sigmoidoscopy and fecal occult blood testing, or FOBT, as well as combinations of some of these methods. Of those people for whom screening is recommended, many reject the option of colonoscopy which, while accurate as a means of detecting colorectal cancer, is invasive. Despite having been available as a screening modality for several years, colonoscopy has not been widely embraced by patients. Until the commercial launch of PreGen-Plus in August of 2003, the only completely non-invasive option for colorectal cancer detection had been FOBT without a digital rectal exam. FOBT, however, suffers from relatively low sensitivity, particularly in detecting the earliest stage, most curable cancers. In addition, FOBT screening tests require unpleasant stool sampling and stool manipulation by the patient, and certain FOBT screening tests also require dietary modifications. With the U.S. launch of PreGen-Plus by LabCorp, PreGen-Plus became the first commercially-available, completely non-invasive, DNA-based cancer screening test in the United States for the average risk population. In a study published in the December 23, 2004 issue of the *New England Journal of Medicine*, PreGen-Plus was shown to be four times more sensitive in detecting colorectal cancer than the most commonly used FOBT screening test on the market today, Hemoccult II®, to which it was compared in this study.

PreGen-Plus is offered commercially by LabCorp, the second largest commercial laboratory in the United States with more than 35 primary laboratories and over 1,700 patient service centers. LabCorp is the exclusive licensee, in the United States and Canada, of certain of our technologies utilized in PreGen-Plus through August 2008, followed by a non-exclusive license for the life of the licensed patents. LabCorp currently does not offer PreGen-Plus in Canada. LabCorp performs the PreGen-Plus test in its

laboratories, makes the test available through its sales force of more than 1,100 people and, by the terms of the license, pays us a royalty on each test reimbursed.

To date, LabCorp has paid us $30 million in upfront license fees and milestones associated with the license. In addition, LabCorp has committed to paying an additional $45 million in milestones and performance incentives in the event that certain third party approval and substantial performance levels are achieved. Between the commercial launch of PreGen-Plus in August 2003 and December 31, 2006, LabCorp has received over 12,500 patient samples for testing from physicians across the country, billed insurers and received payment from numerous third-party payors, including more than 350 health plans. None of these third party payors have yet issued formal policy approval for PreGen-Plus. Moreover, we do not expect that third party payors will issue formal policy approval for PreGen-Plus prior to any inclusion of stool-based DNA screening in the colorectal cancer screening guidelines of major guidelines organizations, or that PreGen-Plus will be broadly used by a payor s members prior to any such formal approval.

Background

Colorectal cancer is the third most common malignant disease and the second most frequent cause of cancer-related death in the United States, with more than 153,000 new cases and more than 52,000 deaths anticipated in 2007. We believe that many colorectal cancer deaths occur because people are not screened for colorectal cancer at all, or they use ineffective screening methods that either fail to detect the cancer or detect it at a later stage, when the five-year survival rate falls below 50%. Moreover, the number of people who die annually from the disease has remained materially unchanged over the last 20 years, despite the availability of multiple colorectal cancer screening options, all of which we believe fail to effectively meet the collective needs of patients, doctors and payors.

As reported in the February 3, 2005 issue of the *New England Journal of Medicine,* the tumor-node-metastasis, or TNM, system of the American Joint Committee on Cancer is now the most commonly used system for staging colorectal cancer and serves as a benchmark for predicting the likelihood of five-year survival. This staging system is described in the table below.

TNM Staging for Colorectal Cancer*

Stage	TNM Classification	Five-Year Survival %
I	T1-2, N0, M0	90
IIA	T3, N0, M0	60-85
IIB	T4, N0, M0	
IIIA	T1-2, N1, M0	25-65
IIIB	T3-4, N1, M0	
IIIC	T (any), N2, M0	
IV	T (any), N (any), M1	5-7

Primary Tumor (T)

TX: Primary Tumor cannot be assessed
Tis: Carcinoma in situ
T1: Tumor invades submucosa
T2: Tumor invades muscularis propria
T3: Tumor penetrates muscularis propria and invades subserosa
T4: Tumor directly invades other organs or structures or perforates visceral peritoneum

Nodal status (N)

NX: Regional lymph nodes cannot be assessed
N0: No metastases in regional lymph notes
N1: Metastases in one to three regional lymph nodes
N2: Metastases in four or more regional lymph nodes

Distant Metastases (M)

MX: Presence or absence of distant metastases cannot be determined
M0: No distant metastases dectected
M1: Distant metastases detected

* Source: Greene FL, Balch CM, Fleming ID, et al., eds. AJCC cancer staging handbook, 6th ed. New York: Springer, 2002.

Detection of pre-cancerous adenomas and colorectal cancer in its earliest stages increases the likelihood of survival and reduces the significant cost associated with treating late-stage colorectal cancer. Accordingly, the ACS recommends that the more than 87 million Americans age 50 and above undergo regular colorectal cancer screening with the methods endorsed by the ACS.

Our Solution

We believe that stool-based DNA detection in the general population offers an opportunity to increase screening rates and decrease mortality from colorectal cancer. Our stool-based DNA detection technology includes proprietary and patented technologies that isolate and analyze the trace amounts of human DNA that are shed into stool every day from the exfoliation of cells that line the colon. When colorectal cancer is present, a minute portion of the total isolated human DNA will represent DNA shed from cancerous or pre-cancerous lesions. Once the human DNA in the sample is isolated, stool-based DNA detection looks for specific mutations and other abnormalities in that DNA associated with colorectal cancer. A positive result from stool-based DNA detection does not necessarily mean that a patient has colorectal cancer. A positive result means that one or more of the genetic markers associated with colorectal cancer likely shows a mutation or abnormality. Under such circumstances, the clinical protocol is for the patient to then obtain a colonoscopy for confirmation. Moreover, a negative result from stool-based DNA detection does not mean that a person is free of colorectal cancer. Stool-based

DNA detection, like virtually all screening tests (including mammography, Prostate Specific Antigen, or PSA, and Papanicolaou smear, or PAP smear) also reports false negatives. See Clinical Studies below for specific information on stool-based DNA technology.

We believe that our proprietary methods and technologies have several advantages that can lead to increased patient compliance and decreased mortality, including:

Performance. We have conducted several clinical studies supporting the performance of stool-based DNA detection for colorectal cancer, including a 5,500 patient multi-center study, the results of which were published in the December 23, 2004 issue of the *New England Journal of Medicine*. Based on this study data, our bead-based stool-based DNA detection technology demonstrated sensitivity four times greater than the leading FOBT, Hemoccult II, currently the most common non-invasive screening method for colorectal cancer, and was more than four times as effective as Hemoccult II in this study in detecting cancer at its early stages, when survival rates approach 90%. The stool-based DNA screening test that was developed by LabCorp and that LabCorp is commercially offering today incorporates several technical improvements over the test that was used in the multi-center study, which we believe result in higher assay sensitivity than that seen in our multi-center study. Moreover, in a recent research study that was published in *Clinical Gastroenterology and Hepatology* in January 2007, our next-generation version of stool-based DNA screening technology, or Version 2, demonstrated sensitivity of 88% and specificity of 82% for the detection of colorectal cancer.

Simplicity and Convenience. Unlike current invasive screening and diagnostic methods, stool-based DNA detection requires no pre-examination preparation, invasive procedures or anesthesia, and a sample can be collected in the privacy of one s home. In addition, our post-market data indicates that more than half of the people surveyed who were screened with stool-based DNA detection had never been screened before, which we believe indicates that stool-based DNA detection can lead to greater patient screening compliance.

The Testing Process

Diagnostic tests typically require sample collection and preparation procedures as well as detection methods. The stool-based DNA testing process involves proprietary sample preparation, DNA isolation, and analytical techniques that apply genomics discoveries to the early detection of colorectal cancer.

Specimen Collection and Transportation. Certain of our patents relating to stool-based DNA screening for colorectal cancer are based on collecting a single whole stool sample in an easy, non-invasive manner. Utilizing a specially designed specimen container, samples can be collected in the privacy of an individual s home and then sent directly to the laboratory for processing using one of the many national couriers.

Representative Sampling. We have invented proprietary stool homogenization methods designed to ensure that the stool sample that is processed at the laboratory will contain uniformly distributed DNA throughout the portion of the sample being tested which, in turn, helps to ensure that the DNA in the stool sample is representative of the entire stool and colon.

DNA Extraction, Purification and Amplification. The isolation and amplification of human DNA found in stool is technically challenging because over 99% of DNA in stool is not human DNA, but is actually DNA from bacteria normally found in the colon. In addition, there are substances in stool that make the isolation and amplification of human DNA a difficult task. Proprietary technologies are used to allow for the reproducible isolation and amplification of the human DNA found in stool.

Cancer Detection Methods. Specialized methods for detecting and identifying genomic markers associated with colorectal cancer can be performed on existing instruments commonly available in clinical laboratories conducting molecular testing.

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Commercial Focus

Our goal is to become a market leader in the development and licensing of technologies for the early detection of cancer, beginning with the early detection of colorectal cancer. To accomplish this goal, we are pursuing a strategy with respect to our technologies that includes the following components:

Pursue commercial introduction of next-generation stool-based DNA screening technology. In a recent research study that we conducted, Version 2 demonstrated sensitivity of 88% and specificity of 82% for the detection of colorectal cancer. The blinded Version 2 research study was designed to test the efficacy of technological advances to enhance colorectal cancer detection in stool. Although the specificity result in the Version 2 study was lower than our previous studies, in which the specificity exceeded 90%, we believe that the significant improvement in sensitivity compared to our prior studies, including our 5,500 patient multi-center study, will provide the basis to pursue commercial introduction of Version 2 in the future. This study involved the blinded analysis of post-colonoscopy collected stool samples from individuals whose colonoscopy results were positive for colorectal cancer. By contrast, our multi-center study, published in the *New England Journal of Medicine* in 2004, was comprised of pre-colonoscopy cancer samples from an asymptomatic population. The Version 2 research study was published in January 2007 in the journal of *Clinical Gastroenterology and Hepatology*.

While it is not yet clear to us when Version 2 of our technology will be made commercially available, our future plans with regard to Version 2 may include seeking the FDA s agreement that Version 2 qualifies as a homebrew testing service, seeking FDA clearance or approval on Version 2 in its assay form, and/or working alone or with a partner to develop an FDA-approved in vitro diagnostic testing kit for colorectal cancer screening, all of which may require additional studies of the Version 2 technology. We may also seek to offer Version 2 as a homebrew testing service out of our own laboratory, rather than having this more advanced technology utilized solely by LabCorp in its homebrew testing service. Offering Version 2 ourselves as a homebrew testing service would require LabCorp s approval as they currently are the exclusive licensee of our stool-based DNA screening technology for this type of diagnostic service.

Obtain inclusion of stool-based DNA screening in national colorectal cancer screening guidelines. Today, professional guidelines recommend screening by a variety of methods including colonoscopy, flexible sigmoidoscopy and FOBT. In general, the guidelines range from the use of colonoscopy every ten years to the use of FOBT annually. Inclusion in screening guidelines is, in our view, among the important preconditions to a test s broad acceptance and commercial use in the market as both physicians and payors frequently follow such guidelines in embracing new technologies. Outlined below is a summary of key organizations with responsibility for developing and publishing colorectal cancer screening guidelines, the relationships between those key organizations and, to our knowledge, the timing of when those organizations typically issue guideline updates.

The U.S. Multisociety Task Force on Colorectal Cancer, a consortium of several organizations including representatives of the American College of Gastroenterology, American Gastroenterological Association, American Society for Gastrointestinal Endoscopy and the American College of Physicians/Society of Internal Medicine (the MSTF-CRC), issued formal colorectal cancer screening guidelines that were endorsed by the ACS in 1997 and 2003. Since that time, the ACS joined with the MSTF-CRC (the ACS/MSTF-CRC) to begin work on a further update of the colorectal cancer screening guidelines. We view inclusion in the guidelines of the ACS/MSTF-CRC as being of primary importance to the commercialization of stool-based DNA screening. We do not expect that there will be a screening guidelines decision issued by the ACS/MSTF-CRC before the end of June 2007, at the earliest. In the event stool-based DNA screening is included in screening guidelines, it may still take several months before this information becomes published and is usable from a sales and marketing perspective. Also, if the guidelines recommendation relates to a particular version of our stool-based DNA screening technology only, and not to stool-based DNA screening in general, or otherwise limits stool-based DNA colorectal cancer screening among the choices offered, this may further limit the test s ability to gain market acceptance and broad adoption.

In addition to its participation in the ACS/MSTF-CRC, and independent of those efforts, the ACS annually publishes its Guidelines for the Early Detection of Cancer in its journal, *CA: A Cancer Journal for Clinicians*. This annual article typically includes an overview of current screening guidelines for all cancers and a review of any guideline revisions made during the prior calendar year, if any. Accordingly, we do not expect stool-based DNA screening to be included in those recommendations and our focus remains on the ACS/MSTF-CRC guideline update relating to stool-based DNA screening for colorectal cancer, which we expect will occur some time after the publication of the ACS s Guidelines for the Early Detection of Cancer appearing in *CA: A Cancer Journal for Clinicians.*

Obtain regulatory clearance of stool-based DNA screening. Current and future versions of stool-based DNA testing, including Version 2, may require FDA clearance or approval. If the FDA determines that our stool-based DNA testing technology, in whole or in part, requires premarket clearance or approval, commercial sales of PreGen-Plus could be delayed, halted or prevented and enforcement action could be initiated which could involve criminal or civil penalties. In addition, the FDA s position on this could negatively affect our operations either through regulation or new enforcement initiatives directed at LabCorp or EXACT. Further, the FDA may not approve of certain sales and marketing initiatives of EXACT, which could negatively affect our ability to build awareness around stool-based DNA testing.

Leverage LabCorp s large sales force. LabCorp is the second largest commercial laboratory in the country and processes over 370,000 patient specimens daily through its system of more than 36 primary laboratories and over 1,700 patient service centers across the United States. LabCorp s large sales force of `more than 1,100 people is devoted to selling a wide range of diagnostic tests to physicians across all specialties. As a result of discussions with the FDA regarding the regulatory status of PreGen-Plus, we have agreed to limit our sales and marketing efforts primarily on the following constituents: thought leaders and third party payors, including self-insured employers, managed care organizations, and the technology assessment groups within these organizations. Accordingly, we intend to leverage LabCorp s sales force to market PreGen-Plus to physicians. We believe that an important element to the successful commercialization of PreGen-Plus is the inclusion of stool-based DNA testing in colorectal cancer screening guidelines of the ACS/MSTF-CRC.

Obtain formal acceptance of stool-based DNA screening for reimbursement by Medicare and other third-party payors. Our reimbursement strategy consists primarily of working with LabCorp to educate large managed care organizations and large self-insured employers about the clinical benefits and cost-effectiveness of using stool-based DNA screening for colorectal cancer. We believe that both the publication of our multi-center study results in the *New England Journal of Medicine* in December 2004 and cost-effectiveness study results regarding stool-based DNA screening will aid in our efforts to gain reimbursement for the test. Accordingly, on December 29, 2004 we submitted our application for a National Coverage Determination to the Centers for Medicare and Medicaid Services, or CMS, for inclusion into the Medicare program. CMS has not approved stool-based DNA colorectal cancer screening for payment, has not yet accepted our request for a National Coverage Determination and has sought additional information regarding PreGen-Plus, which has delayed our application s acceptance. CMS will not deem our application complete until CMS is satisfied that it has received all necessary information to deem the application complete. CMS may determine that we and LabCorp have not provided the necessary information to CMS in a timely manner, if at all, or in a manner acceptable to CMS. After CMS is satisfied that it has received all information necessary for its evaluation of PreGen-Plus, CMS may accept the National Coverage Determination application, deeming it complete, or it may reject the application and request additional information or simply reject it outright. The timing of any acceptance of the National Coverage Determination application or any subsequent coverage decision by CMS is not within our control. We would not expect CMS to make a coverage decision sooner than nine months from the date of any acceptance of the National Coverage Determination application.

Broader diagnostic focus. We expect to continue our research and development efforts to validate and optimize our colorectal cancer screening technology. We are currently evaluating other opportunities in the staging, monitoring and prognosis of colorectal cancer.

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Clinical Studies

Stool-based DNA testing has been the subject of extensive research and clinical studies. In numerous studies to date, the performance of our stool-based DNA technology has been examined in thousands of tissue and stool samples. In a recent published study, Version 2 of our stool-based DNA screening technology demonstrated sensitivity of 88% and specificity of 82% for detecting colorectal cancer. While previous published studies for stool-based DNA screening have generally shown specificity above 90%, the specificity results in the Version 2 study were closer to 80%, a performance metric that may not be deemed clinically or commercially acceptable. The blinded study was designed to test the efficacy of technological advances to enhance colorectal cancer detection in stool. This study involved the analysis of 40 post-colonoscopy collected cancer samples from individuals whose colonoscopy results were positive for colorectal cancer. By contrast, our multi-center study in 2004, published in the *New England Journal of Medicine*, was comprised of 31 cancer samples prior to colonoscopy from an asymptomatic population.

In addition to several smaller clinical studies designed to measure the sensitivity and specificity of stool-based DNA testing in detecting colorectal cancer, the performance of the original version of our stool-based DNA testing technology was compared to the most widely-used FOBT in a large multi-center study that enrolled approximately 5,500 average-risk, asymptomatic patients from more than 80 sites across the United States. The study was designed to determine whether stool-based DNA testing was clinically superior to Hemoccult II®, an FOBT that is currently the most widely used non-invasive colorectal cancer screening test. The primary endpoint of this study was achieved with statistical significance, with a p-value of less than 0.003. Results from the study, which were published in the *New England Journal of Medicine* in December 2004, indicated that stool-based DNA testing was four times more sensitive than Hemoccult II® in the study in detecting colorectal cancer (52% for stool-based DNA testing versus 13% for Hemoccult II®), and more than four times more sensitive in detecting colorectal cancer in its earliest, most curable stages (57% for stool-based DNA testing versus 13% for Hemoccult II®). There was no difference in specificity between stool-based DNA testing and this FOBT, with both tests demonstrating a specificity of approximately 95%.

Sensitivity and specificity results from our clinical studies that have been published are summarized in the table below. The results of these studies may not be directly comparable as these studies were conducted across a variety of patient populations and clinical settings and employed varying sample collection protocols. Moreover, the clinical studies disclosed below do not include any non-published studies regarding stool-based DNA testing, the results of which may differ significantly from those set forth below.

Technology & Study Name	Year Completed / Published	Number of Cancer Samples Analyzed	Number of Genetic Markers	DNA Capture Technology	DNA Stabilization Buffer Used (1)	Sensitivity	Specificity (2)
Version 1 Studies							
Mayo Clinic I Pilot Study	1999 / 2000	22	17	Bead-based	No	91%	93%
University of Nebraska	2002 / 2004	16	22	Bead-based	No	69%	(2)
Kaiser Clinic	2002 / 2003	52	23	Bead-based	No	64%	98%
Boston	2002 / 2006	68	23	Bead-based	No	63%	(2)
Multi-Center Study	2003 / 2004	31	23	Bead-based	No	52% (3)	94%
Effipure Technology Validation	2004 / 2004	86	23	Effipure (4)	No	70% (5)	96
Mount Sinai School of Medicine	2005 / 2007	40	23	Effipure (4)	Yes	73%	89%
Version 2 Study							
Mount Sinai School of Medicine	2005 / 2007	40	2	Effipure (4)	Yes	88%	82%

(1) DNA stabilization buffer is used to protect against DNA degradation during sample transport.

(2) Specificity can only be derived in studies that include a certain number of individuals without cancer. The studies in the table without a specificity figure did not contain the requisite number of disease-free individuals.

(3) Based on published studies, including the Mount Sinai School of Medicine studies, we believe that the sample collection protocols used in this study resulted in DNA degradation that, in turn, resulted in lower sensitivity of our technology than that demonstrated in our prior published studies.

(4) Effipure is a technological improvement that has been utilized in LabCorp s commercial testing service, PreGen-Plus, designed to increase human DNA yield

(5) In November of 2004, we published a study in the *Journal of Molecular Diagnostics* that showed a 5.4 fold increase in the amount of DNA that could be captured using the Effipure technology rather than the older, bead-based technology. The sensitivity result from this study is not a conclusion regarding the sensitivity of the commercial test on the market today.

In October 2001, Mayo Clinic initiated a study of the bead-based version of our technology that was intended to include approximately 4,000 patients at average risk for developing colorectal cancer. This three-year study was designed to compare the results of our original technology with those of the Hemoccult II, a common first-line FOBT colorectal cancer screening option. The Mayo study was principally powered for the detection of screen relevant neoplasia (a category that includes high grade dysplasia, invasive cancer, and adenomas ≥1cm) rather than invasive cancers as a stand alone category. After this study commenced, Hemoccult Sensa®, another brand of FOBT, was added to the study. Subsequently, we and the Mayo Clinic sought to include the Effipure technology in the study to improve DNA yield, rather than relying solely on our original bead-based technology. In connection with this technology transition, Mayo Clinic reviewed preliminary data from the study which showed that, while our bead-based technology was nearly twice as sensitive as Hemoccult II and as sensitive as Hemoccult Sensa in detecting screen-relevant neoplasia, Hemoccult II and Hemoccult Sensa appeared to have outperformed, at a preliminary stage, our bead-based technology in the detection of cancer among the thirteen cancer samples collected in the study. As the study proceeded beyond this preliminary stage, however, Mayo Clinic evaluated additional cancers and late stage adenomas (i.e., screen relevant neoplasia) and has offered the following updated principal findings on the larger data set: (1) stool DNA technology detected three times more screen relevant neoplasia than Hemoccult II and two times more screen relevant neoplasia than Hemoccult Sensa, but at a much lower specificity; and (2) that use of DNA stabilization buffer with stool collection improves stool DNA screening detection performance. We still believe that the sample collection protocols used for the vast majority of samples in this study, like the sample collection protocols as those used in our multi-center study, resulted in DNA degradation that, in turn, resulted in lower sensitivity of our technology. In addition, although our older technology detected some adenomas, this version of our technology was designed only to detect cancer, not adenomas, both of which are included in the definition of screen-relevant neoplasia.

Research and Development

Our research and development efforts are primarily focused on validating and optimizing our Version 2 technology for commercial introduction. Our research and development expenses were $11.1 million, $8.0 million and $6.8 million for the years ended December 31, 2004, 2005 and 2006, respectively.

Our research and development efforts are primarily focused on continuing to optimize and validate Version 2 of our stool-based DNA screening technology, which demonstrated sensitivity of 88% and specificity of 82% in a recent published study. The future commercialization of our Version 2 technology depends materially on whether the ACS/MSTF-CRC issue guidelines that are generic with regard to stool-based DNA testing in general, or whether any such recommendation is limited to a particular version of our stool-based DNA technology. Moreover, the future commercialization of our Version 2 technology could require additional studies and, accordingly, the timing of any such commercialization is uncertain. Moreover, transferring Version 2 from the laboratory to the commercial setting will also require

the negotiation and licensing of necessary third-party intellectual property as well as the likelihood of additional technical and clinical validations of the technology to demonstrate, among other objectives, the reliability and reproducibility of the Version 2 results.

Sales and Marketing

We currently have only two field sales personnel and two marketing personnel. We are materially dependent on LabCorp s sales efforts in building market demand for PreGen-Plus. The primary focus of our sales and marketing organization to date has been to help build awareness surrounding stool-based DNA testing for colorectal cancer. Since the August 2003 commercial launch of PreGen-Plus, we have been working with LabCorp on various sales and marketing initiatives to help build awareness surrounding stool-based DNA testing. LabCorp s large sales force of more than 1,100 people, calls on primary care physicians and promotes numerous products, including PreGen-Plus. The entirety of our sales and marketing efforts are focused primarily on the following constituents: thought leaders and third party payors, including self-insured employers, managed care organizations, and the technology assessment groups within these organizations.

Our sales and marketing strategy focuses on the following:

Thought Leaders. Gastroenterologists are highly vocal in advocating colorectal cancer screening, and perform the vast majority of the reference standard diagnostic procedure, colonoscopy. They are also key to establishing new tests as standards of care for inclusion in screening guidelines.

Third-Party Payors. Another important focus includes third party payors, including Medicare, major national and regional managed care organizations, technology assessment groups, insurance carriers and self-insured employer groups. The goals with these target groups are to educate these groups regarding the benefits of stool-based DNA testing in order to gain formal policy-level reimbursement for stool-based DNA testing. Since our restructuring in October 2006, we have devoted fewer resources to these initiatives pending the outcome of the colorectal cancer screening guidelines decision from the ACS/MSTF-CRC.

Advocacy Development. We seek to work with influential advocacy groups to promote their awareness of stool-based DNA testing and its potential value in clinical practice toward the goal of reducing mortality from colorectal cancer. To the extent possible based on our existing resources, we intend to continue to build on growing public awareness of colorectal cancer through our activities with these advocacy groups. Since our restructuring in October 2006, we have devoted fewer resources to our sales and marketing initiatives pending the outcome of the colorectal cancer screening guidelines decision from the American Cancer Society and the Multi-Society Task Force.

The FDA may not approve of certain of our sales and marketing initiatives and we have sought to limit our sales and marketing investment pending the outcome of the guidelines decision referenced above. This could restrict or negatively impact our ability to build awareness around stool-based DNA testing.

Reimbursement

On December 29, 2004, we submitted our application for a National Coverage Determination to CMS for inclusion into the Medicare program. CMS has not approved stool-based DNA colorectal cancer screening for payment, has not yet accepted our request for a National Coverage Determination and has sought additional information regarding PreGen-Plus, which has delayed our application s acceptance. CMS will not deem our application complete until it is satisfied that it has received all necessary information to deem the application complete. CMS may determine that we and LabCorp have not provided the necessary information to CMS in a timely manner, if at all, or in a manner acceptable to CMS. After CMS is satisfied that it has received all information necessary for its evaluation of PreGen-Plus, CMS may accept our application, deeming it complete, or it may reject the application and request additional information or simply reject it outright. The timing of any acceptance of the application or any

subsequent coverage decision by CMS is not within our control. We would not expect CMS to make a coverage decision sooner than nine months from the date of any acceptance of the National Coverage Determination application.

Government Regulation

Certain of our activities are, or have the potential to be, subject to regulatory oversight by the FDA under provisions of the Federal Food, Drug and Cosmetic Act and regulations thereunder, including regulations governing the development, marketing, labeling, promotion, manufacturing and export of certain technologies. Failure to comply with applicable requirements can lead to sanctions, including withdrawal of products from the market, recalls, refusal to authorize government contracts, product seizures, civil money penalties, injunctions and criminal prosecution.

Laboratories that make and perform certain types of laboratory-developed tests, known in the industry as homebrew testing services, are not required to submit data on the test for FDA review and approval. Instead, laboratories that develop their own clinical diagnostic test must follow the regulations of the Clinical Laboratory Improvement Amendments of 1988, or CLIA. We historically believed, since the commercial launch of PreGen-Plus in 2003, that PreGen-Plus met the requirements to qualify for regulation under CLIA as a homebrew test and that in-house testing utilizing certain of our technologies, and using any analyte specific reagent that we develop, do not require FDA approval or clearance.

Since the commercial launch of PreGen-Plus in August 2003, LabCorp has offered the PreGen-Plus testing service as an in-house developed laboratory test, or homebrew. The FDA has historically exercised enforcement discretion with regard to such homebrew tests, by not requiring FDA pre-market clearance or approval for such testing services. On January 13, 2006, the FDA sent correspondence to LabCorp with respect to the PreGen-Plus testing service, as well as the Effipure component used in processing PreGen-Plus tests, which indicated that PreGen-Plus is subject to FDA regulation as a medical device. The FDA also indicated that the device cannot be commercially distributed without an appropriate pre-market determination from the FDA. Pursuant to our and LabCorp s subsequent discussions with the FDA to clarify the regulatory status of PreGen-Plus, we and LabCorp agreed, among other things, to revise our promotional activities with respect to LabCorp s PreGen-Plus testing service. In addition, LabCorp offered to eliminate its use of Effipure in processing PreGen-Plus tests. Based on the actions outlined above and our communications with the FDA, we believe that LabCorp intends to continue to market, sell and process the PreGen-Plus test as a homebrew testing service. Moreover, LabCorp s supply of Effipure includes components that have a finite useful life the duration of which, we believe, may be nearly exhausted. If LabCorp is unable to extend the useful life of these components, or is unable to otherwise take steps necessary to extend the useful life of Effipure, then LabCorp may be unable to continue to process PreGen-Plus tests in the near term.

On September 7, 2006, the FDA issued a Draft Guidance Document in which the FDA said that homebrew tests were subject to FDA regulation as devices, and that the FDA would require pre-market clearance for certain types of homebrew tests involving the use of algorithms and/or scoring of results. Although we do not believe that the PreGen-Plus test represents the type of algorithm-based or scoring test to which this Draft Guidance Document refers, we cannot assure you that the FDA will view LabCorp s PreGen-Plus testing service, in whole or in part, as falling outside of the reach of this guidance document or as being exempt from pre-market approval requirements.

In addition, any stool-based DNA *in vitro* diagnostic test kit that we may develop in the future, we believe, would be required to be submitted to the FDA for approval prior to marketing. This is distinct from LabCorp s PreGen-Plus testing service, which remains on the market today as a homebrew testing service. LabCorp s license to our technologies includes rights to current versions of our technologies for a homebrew developed testing service, as well as any improvements we make to such technology, including our Version 2 technology. LabCorp does not have license rights to an FDA-approved *in vitro* diagnostic test kit of Version 2 that we may develop.

We and our strategic partner, LabCorp, are also subject to U.S. and state laws and regulations regarding the operation of clinical laboratories. Federal CLIA requirements and laws of certain other states impose certification requirements for clinical laboratories, and establish standards for quality assurance and quality control, among other things. Clinical laboratories are subject to inspection by regulators, and the possible sanctions for failing to comply with applicable requirements. Sanctions available under CLIA include prohibiting a laboratory from running tests, requiring a laboratory to implement a corrective plan, and imposing civil monetary penalties. If LabCorp fails to meet any applicable requirements of CLIA or state law, it could further delay acceptance of our CMS application, prevent its approval entirely, and/or interrupt the commercial sale of PreGen-Plus and otherwise cause us to incur significant expense.

In addition, the specimen containers that are used in connection with the PreGen-Plus test may also be deemed to be medical devices regulated by the FDA. Once a physician orders a test, the patient will need to receive a specimen container to collect the patient s stool. Specimen transport and storage containers generally have been exempted by regulation from the FDA s premarket clearance or approval requirement and much of the Quality System Regulation. We believe that the specimen container falls within an applicable exemption, but we cannot be sure that the FDA will not assert that the container is not exempt and seek to impose a premarket clearance or approval requirement on the container itself.

Intellectual Property

To protect our proprietary technologies, we rely on a combination of patent, trademark, and copyright protection, and other contractual restrictions to protect our proprietary technologies, as well as confidentiality agreements with employees, consultants, and third parties.

We have pursued a patent strategy designed to maximize our patent position with respect to third parties. Generally, we have filed patents and patent applications that cover the methods we have designed to detect colorectal cancer as well as other cancers. We have also filed patent applications covering the preparation of stool samples and the extraction of DNA from heterogeneous stool samples. As part of our strategy, we seek patent coverage in the United States and in foreign countries on aspects of our technologies that we believe will be significant to our market strategy or that we believe provide barriers to entry for our competition. We believe that the United States and western Europe represent the most realistic near term markets for stool-based DNA testing.

As of December 31, 2006, we had 37 patents issued and 18 pending patent applications in the United States and, in foreign jurisdictions, 75 patents issued and 49 pending applications. Our success depends to a significant degree upon our ability to protect our technologies through patent coverage.

Each of our patents generally has a term of 20 years from its respective priority filing dates. Consequently, our first patents are set to expire in 2016. We have filed terminal disclaimers in certain later-filed patents, which means that such later-filed patents will expire earlier than the twentieth anniversary of their priority filing dates.

We and a third-party institution have filed a joint patent application under the Patent Cooperation Treaty that will be co-owned by us and the third-party institution relating to the use of various DNA markers, including the DNA Integrity Assay, to detect cancers of the lung, pancreas, esophagus, stomach, small intestine, bile duct, naso-pharyngeal, liver and gall bladder in stool. This patent application does not relate to the detection of colorectal cancer and national rights are being pursued in the United States, Japan, Europe and Canada.

We license on an exclusive basis, in the field of stool-based colorectal cancer screening, from Matrix Technologies Corporation, d/b/a Apogent Discoveries, certain patents owned by Apogent relating to its Acrydite technologies, which we have sublicensed to LabCorp. The rights provided under this license provides LabCorp with the ability to manufacture and use the Acrydite technology in the PreGen-Plus test. The Acrydite technology is useful in connection with the proprietary electrophoretic DNA gel capture

technology used in the isolation of nucleic acids and the diagnosis of disease. We no longer manufacture, supervise the manufacture, or ship any components used in connection with the Acrydite or Effipure technologies.

We license on an exclusive basis from Johns Hopkins University certain patents owned by JHU that relate to digital amplification of DNA. We believe that this license may ultimately allow us and our partners to develop and commercialize novel detection technologies to further enhance the performance of stool-based DNA screening technologies. In exchange for the license, we have agreed to pay JHU certain royalties on revenues received by us relating to our or our sublicensees sales of products and service.

We license on a non-exclusive basis from Beckman Coulter certain patents owned by Beckman Coulter that relate to its Single Based Extension, or SBE, technology. The license provides us and our sublicensee, LabCorp, with the ability to use SBE in the PreGen-Plus test.

LabCorp also maintains and is currently negotiating additional third-party technology license and supply agreements that are necessary for their PreGen-Plus testing service. In connection with our agreement with FDA, we no longer manage the supply chain components for the development and sale of Effipure to LabCorp. LabCorp recently agreed to manage this supply chain itself and to source components necessary for Effipure directly from outside vendors or, if appropriate, to develop one or more of such components itself. While LabCorp has access to certain levels of inventory of Effipure, there can be no assurance that such inventory levels will be sufficient to support the processing of PreGen-Plus tests for the period of time necessary for LabCorp to establish the relationships necessary for the manufacture, supply, and assembly of Effipure components.

We and LabCorp will also need to secure additional third-party intellectual property prior to any commercial introduction of the Version 2 technology.

Competition

To our knowledge, none of the large genomics or diagnostics companies are developing tests to conduct stool-based DNA testing in the United States. We are aware that a Norwegian company, Nordiag ASA, offers a stool-based colorectal cancer test, currently only available in Norway, Sweden and Denmark, known as Genefec. Moreover, other companies may be working on similar tests that have not yet been announced. In addition, other companies may succeed in developing novel technologies or improving existing technologies and marketing products and services that are more effective or commercially attractive than ours. Some of these companies may be larger than we are and can commit significantly greater financial and other resources to all aspects of their business, including research and development, marketing, sales and distribution.

Currently, stool-based DNA detection faces competition from procedure-based detection technologies such as flexible sigmoidoscopy, colonoscopy and virtual colonoscopy, a radiological imaging approach which visualizes the inside of the bowel by use of spiral computerized axial tomography (CT scan), as well as existing and possibly improved traditional screening tests such as immunochemical FOBT and improvements to colonoscopy. In addition, some competitors are developing serum-based tests, or screening tests based on the detection of proteins or nucleic acids produced by colon cancer in the blood. We believe that pharmaceutical and medical device marketing efforts directed at physicians represent competition for physician attention for the sales force selling PreGen-Plus.

We believe the principal competitive factors in the cancer screening market include:

- high sensitivity;
- high specificity;
- non-invasiveness;

- acceptance by the medical community, especially primary care medical practitioners;
- adequate reimbursement from Medicare and other third-party payors;
- price;
- cost-effectiveness; and
- patent protection.

Employees

As of December 31, 2006, we had twenty-two employees, two of whom have a Ph.D. and one of whom has an M.D. We currently have ten employees engaged in research and development, five employees in sales and marketing and seven employees in general and administration. None of our employees are represented by a labor union. We consider our relationship with our employees to be good.

Available Information

We were incorporated in the State of Delaware on February 10, 1995. Our executive offices are located at 100 Campus Drive, Marlborough, Massachusetts 01752. Our telephone number is 508-683-1200. Our Internet website address is http://www.exactsciences.com. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available through the investor relations page of our internet website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC). Our Internet website and the information contained therein or connected thereto are not intended to be incorporated into this Annual Report on Form 10-K.

Item 1A. Risk Factors

We operate in a rapidly changing environment that involves a number of risks, some of which are beyond our control. This discussion highlights some of the risks which may affect future operating results. These are the risks and uncertainties we believe are most important for you to consider. Additional risks and uncertainties not presently known to us, which we currently deem immaterial or which are similar to those faced by other companies in our industry or business in general, may also impair our business operations. If any of the following risks or uncertainties actually occurs, our business, financial condition and operating results would likely suffer.

If stool-based DNA screening is not included in colorectal cancer screening guidelines of the major organizations issuing guidelines recommendations, or if inclusion or notification of inclusion in such screening guidelines is significantly delayed, our business, financial condition and results of operations would be materially adversely affected.

Our future revenues will depend, in large part, upon whether stool-based DNA screening is included in colorectal cancer screening guidelines of major guidelines organizations (including the U.S. Multisociety Task Force on Colorectal Cancer, a consortium of several organizations including representatives of the American College of Gastroenterology, American Gastroenterological Association, American Society for Gastrointestinal Endoscopy and American College of Physicians/Society of Internal Medicine (the MSTF-CRC)), and the American Cancer Society (ACS). Although the ACS Colorectal Cancer Advisory Committee and the MSTF-CRC, together, the ACS/MSTF-CRC, commenced a review of stool-based DNA and other colorectal cancer screening technologies in June 2006, which continued in September 2006, it did not make any decision regarding the inclusion of stool-based DNA technology in colorectal cancer screening guidelines. The timing and determination as to whether stool-based DNA screening is included in colorectal cancer screening guidelines is outside of our control. We cannot assure you that a decision regarding stool-based DNA will be made or that stool-based DNA screening will ever

be included in colorectal cancer screening guidelines. Even if a recommendation is made to include stool-based DNA screening in guidelines, such inclusion could involve a process spanning many months from the meeting of key guidelines decision-makers to notification of inclusion or exclusion from guidelines.

In addition, following its June 2006 meeting, the ACS/MSTF-CRC requested certain information from us relating primarily to our Version 2 next generation colorectal cancer technology. It is possible that ACS/MSTF-CRC may reject stool-based DNA screening or defer a recommendation regarding such screening for a number of reasons, including until such time as our Version 2 colorectal cancer screening technology is fully developed and adequately supported by clinical data, which could take several years, if it happens at all. Moreover, even if a recommendation is made to include stool-based DNA screening in guidelines, such inclusion could involve a recommendation for only our Version 1 technology, which may substantially limit adoption of stool-based DNA screening, or such recommendation could relate only to a narrow screening purpose or subset of the population, or for some other limited purpose or application of stool-DNA screening that does not provide for broad use of stool-DNA screening. If stool-based DNA screening is not included in colorectal cancer screening guidelines for broad and sufficiently frequent use within the population at the next anticipated meeting of the ACS/MSTF-CRC, or if inclusion or notification of inclusion in such screening guidelines is significantly delayed, our business, financial condition and results of operations would be materially adversely affected and our business direction may change. In such event, we could be required to further significantly curtail our operations. An adverse guidelines determination could also result in the impairment of the recorded value of our patent portfolio, which was ($0.8 million at December 31, 2006), or our fixed assets. In addition, in the event of an adverse guidelines determination, LabCorp could request payment of the third party royalty amount ($2.4 million at December 31, 2006) for which we are we contingently liable. See discussion of third party royalty contingent liability in note 9 to our consolidated financial statements included in this annual report of Form 10-K.

We may never successfully commercialize any of our technologies or become profitable.

We have incurred losses since we were formed and have had only modest product and royalty fee revenues since the commercial launch of PreGen-Plus in August 2003. From our date of inception on February 10, 1995 through December 31, 2006, we have accumulated a total deficit of approximately $150.8 million. We expect that our losses will continue for at least the next several years and, depending upon our strategic direction, we may need to invest significant additional funds toward other areas in the oncology testing business. To achieve material demand for PreGen-Plus, or other stool-based DNA testing services utilizing our technologies, we believe that substantial funds will likely need to be invested in sales and marketing efforts over the next several years. In addition, the development of our Version 2 technology could require additional studies or FDA approval, either of which could involve significant time as well as research and development expenditures. Given our current levels of cash and revenues, and without raising additional capital, we will not be able to spend the amounts that we believe will likely be necessary to fund these investments and there can be no assurance that LabCorp will invest sufficient amounts in sales and marketing activities for PreGen-Plus. In addition, while we believe we are permitted, from a regulatory standpoint, to promote stool-based DNA testing services generically, our inability to market the brand PreGen-Plus under current FDA regulations, may limit our return on amounts that we have invested or may invest in sales and marketing activities. If our revenue does not grow significantly, we will not be profitable. We cannot assure you that the revenue from the sale of any of our technologies will be sufficient to make us profitable.

Our future revenues will depend, in large part, upon whether PreGen-Plus is broadly ordered by medical practitioners and requested by patients. We believe that our ability to achieve the foregoing may be affected by the following:

- the inclusion of stool-based DNA screening in general, including our Version 2 technology, in colorectal cancer screening guidelines of major guidelines organizations, including the ACS/MSTF-CRC;

- the positioning of stool-based DNA screening within guidelines such that it is not limited among the screening options offered;

- the regulatory requirements for PreGen-Plus or Version 2, and the timing of any required regulatory filing and approval process;

- whether LabCorp continues to offer PreGen-Plus commercially;

- acceptance, endorsement and formal policy approval of stool-based DNA screening for reimbursement by Medicare and other third-party payors;

- effective negotiation and contracting by LabCorp with Medicare and other third-party payors for coverage and reimbursement of PreGen-Plus;

- whether payors issue favorable coverage policy for stool-based DNA screening if it is included in the screening guidelines of one or more, but not all, of the major guidelines organizations;

- effective LabCorp sales and sales management personnel and processes to educate physician staffs regarding PreGen-Plus and patient compliance;

- effective EXACT personnel to educate third-party payors, managed care organizations, and technology assessment groups regarding stool-based DNA screening;

- patient acceptance of PreGen-Plus, including its novel sample collection process;

- stool-based DNA screening becoming a standard of care among prescribing physicians; and

- the quality and service of the LabCorp testing process.

Many of these factors are outside our control and, accordingly, we cannot assure you that one or more of the foregoing will occur in the near term, or at all. Failure to achieve one or more of the foregoing events could substantially impair our ability to generate revenues and achieve profitability and will negatively impact the successful commercialization of PreGen-Plus or other stool-based DNA testing services utilizing our technologies.

Our inability to raise additional capital on acceptable terms in the future may limit our growth.

We incurred substantial losses to date and we expect to incur substantial losses for the foreseeable future. We have no current sources of material ongoing revenue. As of December 31, 2006, we had an accumulated deficit of approximately $150.8 million. We will have to raise additional funds to continue the development and commercialization of our technologies. Moreover, if we modify our business strategy to pursue other initiatives or technologies and are required to invest material amounts in the acquisition of these technologies, our current cash, cash equivalents and marketable securities balances could be reduced significantly. Our future liquidity and capital requirements will depend upon numerous factors, including the following:

- the inclusion of stool-based DNA screening in colorectal cancer screening guidelines of major guidelines organizations, including the ACS/MSTF-CRC, and the timing thereof;

- the regulatory requirements for PreGen-Plus, or other stool-based DNA testing services utilizing our technologies, and the timing of any required regulatory approval process;

- acceptance, endorsement and formal policy approval of stool-based DNA screening for reimbursement by Medicare and other third-party payors;

- our ability to achieve milestones under our strategic agreement with LabCorp;
- a determination that additional studies surrounding our technologies are needed;
- a sustained level of interest and commitment by LabCorp in the commercialization of PreGen-Plus;

- stool-based DNA screening becoming a standard of care among prescribing physicians;
- the scope of and progress made in our research and development activities;
- the successful commercialization and sales growth of PreGen-Plus, or other stool-based DNA testing services utilizing our technologies; and
- a shift in our strategic direction or entry into new markets.

Our inability to raise capital would seriously harm our business and development efforts. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operations. These funds may not be available on favorable terms, or at all. If adequate funds are not available on attractive terms, we may have to restrict our operations significantly or obtain funds by entering into agreements on unattractive terms. Further, to the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in dilution to our stockholders.

If we or LabCorp fail to comply with FDA requirements, we or LabCorp may be limited or prohibited in our ability to commercialize stool-based DNA testing for colorectal cancer and may be subject to stringent penalties.

Since the commercial launch of PreGen-Plus, LabCorp has offered the testing service as an in-house developed laboratory test, or homebrew testing service. The FDA has historically exercised enforcement discretion with regard to such homebrew tests by not requiring FDA pre-market clearance or approval for such testing services. On September 7, 2006, however, the FDA issued a Draft Guidance Document in which the FDA said that homebrew tests were subject to FDA regulation as devices, and that the FDA would require pre-market clearance for certain types of homebrew tests involving the use of algorithms and scoring of results. Although we do not believe that the PreGen-Plus test represents the type of algorithm-based or scoring test to which this Draft Guidance Document refers, we cannot assure you that the FDA will view LabCorp s PreGen-Plus testing service, in whole or in part, as exempt from pre-market approval requirements. In addition, on January 13, 2006, the FDA sent correspondence to LabCorp with respect to the PreGen-Plus testing service, as well as the Effipure component used in processing PreGen-Plus tests, which indicated that PreGen-Plus is subject to FDA regulation as a medical device and that the device cannot be commercially distributed without an appropriate pre-market determination from the FDA. Pursuant to our and LabCorp s subsequent discussions with the FDA, we and LabCorp agreed, among other things, to revise our promotional activities with respect to LabCorp s PreGen-Plus testing service. In addition, LabCorp offered to eliminate its use of Effipure in processing PreGen-Plus tests. We believe that LabCorp intends to continue to market, sell and process the PreGen-Plus test as a homebrew testing service. If the FDA does not view LabCorp s PreGen-Plus testing service as exempt from pre-market approval, LabCorp s use of PreGen-Plus could be delayed, halted or prevented and enforcement action could be initiated which could involve criminal or civil penalties, any of which would impair the commercialization of PreGen-Plus and materially harm our business.

Moreover, if the FDA were to determine that any of our technologies or other materials that we provide and are used in connection with LabCorp s PreGen-Plus testing service require pre-market approval or clearance, we would be subject to a number of FDA requirements, including compliance with the September 7, 2006 Draft Guidance Document or restrictions regarding performance claims as well as the FDA s Quality System Regulation, which establishes extensive regulations for quality assurance and control as well as manufacturing procedures. Failure to comply with these regulations could result in enforcement action against us, our partners, or our contract manufacturers. Adverse FDA action in any of these areas, including, for example, requiring pre-market approval or clearance for PreGen-Plus or any element that comprises PreGen-Plus, could cause material interruption in LabCorp s ability to continue offering the PreGen-Plus testing service and could significantly increase our expenses and limit our revenue and profitability.

Our ability to generate revenue depends on LabCorp s commercial sales of PreGen-Plus.

All of our current operating revenue is dependent upon LabCorp s commercial sales of PreGen-Plus. We cannot assure you that LabCorp will be successful in achieving sufficient sales of PreGen-Plus for us to become profitable, nor can we be certain that LabCorp, in light of FDA regulatory action or otherwise, will keep PreGen-Plus on the market.

If LabCorp is unsuccessful in increasing sales of PreGen-Plus, our revenues will be limited and our ability to become profitable will be materially adversely affected. We cannot control whether LabCorp will devote sufficient resources to PreGen-Plus under our strategic agreement or whether it will elect to pursue the development or commercialization of newer versions of stool-based DNA testing or competing products or services. Any failure of the LabCorp sales force to give continued and sustained focus to PreGen-Plus could harm the demand creation for PreGen-Plus and, in turn, could materially adversely affect our revenues and delay any performance-based payments for which we might otherwise be eligible, based on substantial sales volumes, under our strategic agreement with LabCorp. Any change in the senior management or organizational structure within LabCorp or us, could also negatively impact our ability to successfully commercialize PreGen-Plus.

Further, laboratory operating factors incurred at LabCorp such as turnaround times for the testing process, possible pre- and post-analytical sample and sample processing deficiencies and efforts to obtain third-party reimbursement all influence the rate of market adoption of PreGen-Plus. If LabCorp encounters difficulty performing PreGen-Plus tests on an accurate and timely basis or has difficulty obtaining reimbursement, our revenue could be materially and adversely affected. Future demand for the PreGen-Plus test may require LabCorp to further optimize operational and quality assurance processes to support commercial testing. No assurance can be given that such improvements will be successfully implemented by LabCorp, and failure to do so could adversely affect our ability to generate revenues.

Our business is substantially dependent on the success of our strategic agreement with LabCorp.

We have a strategic alliance with LabCorp, under which we licensed to LabCorp certain of our technologies, including improvements to such technologies, that are required for the commercialization of PreGen-Plus. The license to LabCorp is exclusive within the United States and Canada for a five-year term followed by a non-exclusive license for the life of the underlying patents. LabCorp has the ability to terminate this agreement for, among other things, a material breach by us. If LabCorp were to terminate the agreement, fail to meet its obligations under the agreement, decide to stop processing PreGen-Plus commercially, or otherwise decrease its commitment to PreGen-Plus, our revenues would be materially adversely affected, the commercialization of PreGen-Plus would be interrupted and we could become insolvent. We cannot guarantee that we would be able to enter into a similar agreement with another company to commercialize this technology. Moreover, if we do not achieve certain milestones, or LabCorp does not achieve certain revenue and performance thresholds within the time periods prescribed in the agreement, we may not fully realize the expected benefits of the agreement.

In January 2004, we and LabCorp amended our license agreement to, among other things, restructure certain product development milestones. Although this amendment did not change the $45 million of total milestone payments that we may be eligible to receive under the agreement, it modified the targets set for achievement of these milestones and, as such, made it more difficult for us to fully realize these payments if LabCorp is unable to achieve significant revenue thresholds with respect to its sales of PreGen-Plus or if we are unable to obtain clinical guideline acceptance and policy-level reimbursement approvals for PreGen-Plus. For example, if colorectal cancer screening guidelines are updated in 2007 to include only a particular version of our technology, LabCorp may decide to stop offering PreGen-Plus commercially, in which case our business and ability to generate revenues would be materially and adversely affected.

To accomplish our long-term business objectives, we may be required to enter into additional amendments to our license agreement with LabCorp. For instance, we are currently in discussions that could result in an amendment to the license agreement. We cannot assure you that our prior amendment,

these recent discussions or other strategic initiatives with LabCorp will accomplish the long-term goals of either party. If one or more additional amendments to our agreement with LabCorp become necessary as a result of the continuing evolution of PreGen-Plus, developments in our relationship with LabCorp or otherwise, we cannot assure you that any such amendment could be entered into on favorable terms, if at all.

Disagreements with LabCorp could delay or terminate the continued commercialization of PreGen-Plus by LabCorp or result in litigation or arbitration, any of which would have a material adverse affect on our business, financial condition and results of operations. Moreover, if we are unsuccessful in managing our strategic relationship with LabCorp, we would be required to enter into other strategic relationships for the commercialization of PreGen-Plus or attempt to commercialize the testing service ourselves. We cannot assure you that we would be able to license our technology to another commercial laboratory or otherwise successfully commercialize the testing service, and our failure to do either of the foregoing would materially and adversely affect our ability to generate revenues.

If Medicare and other third-party payors, including managed care organizations, do not issue positive policy decisions approving reimbursement for PreGen-Plus, the commercial success of PreGen-Plus would be compromised.

Many physicians may decide not to order colorectal cancer screening tests using our technologies unless the tests are adequately reimbursed by third-party payors, including Medicare. There is significant uncertainty concerning third-party reimbursement for the use of tests incorporating new technology. Reimbursement by a third-party payor may depend on a number of factors, including a payor s determination that tests using our technologies are: sensitive for colorectal cancer; not experimental or investigational; approved by the major guidelines organizations; reliable, safe and effective, medically necessary; appropriate for the specific patient and cost-effective. Currently, no third-party payors have issued broad formal policy approving payment for stool-based DNA testing. Furthermore, the Centers for Medicare and Medicaid Services have not yet approved stool-based DNA testing for colorectal cancer for payment, CMS has not yet accepted our request for a National Coverage Determination and CMS has sought additional information regarding PreGen-Plus, which has delayed our application s acceptance.

Neither we nor LabCorp has secured any broad-based policy-level reimbursement approval from Medicare or a sufficient amount of third-party payors to ensure the long-term commercial success of PreGen-Plus. For example, although PreGen-Plus received a favorable review from the California Technology Assessment Forum, a unit of the Blue Shield of California Foundation, in March 2005, this review has not resulted in any policy-level reimbursement approval by Blue Shield of California. Moreover, several Blue Shield plans across the country have declined to issue positive reimbursement policy for PreGen-Plus at this time.

If we or LabCorp are unable to obtain a positive policy decision from CMS or other third-party payors, including managed care organizations, approving reimbursement for PreGen-Plus, the commercial success of PreGen-Plus would be compromised and our revenues would be significantly limited.

Our business would suffer if we, or LabCorp, are unable to license certain technologies or obtain raw materials and components or if certain of our licenses were terminated.

LabCorp s current configuration of PreGen-Plus requires access to certain technologies and supplies of raw materials, including elements relating to the Effipure microtiter plates, for which licensing and supply agreements are required. Similarly, the commercialization of the next generation of our stool-based DNA screening technology, or Version 2, will require that we or LabCorp license certain third-party intellectual property. There can be no assurance that we, or LabCorp, can obtain these technologies and raw materials on acceptable terms, if at all. Although LabCorp recently indicated to the FDA that it is working on changes to PreGen-Plus that could eliminate the use of Effipure in processing PreGen-Plus tests, we cannot assure that it will be able to replace Effipure or that any substitute technology will have comparable performance. There also can be no assurance that existing Effipure inventory levels will be

sufficient to support the processing of PreGen-Plus tests for the period of time necessary for LabCorp to replace Effipure in commercial use. Failure to transition to a new and effective DNA capture technology could have a material adverse affect on the processing of PreGen-Plus and on our business. In the event LabCorp is able to identify a new DNA capture technology for use in connection with PreGen-Plus, any such technology may require us or LabCorp to pay additional royalties or other fees to third parties, which would have an adverse affect on our revenues or gross margin. Furthermore, there can be no assurance that any current contractual arrangements between us and third parties, us and LabCorp, LabCorp and vendors in the DNA capture component supply chain, or between our strategic partners and other third parties, will be continued, or not breached or terminated early, or that we or LabCorp will be able to enter into any future relationships necessary to the continued commercial sale of PreGen-Plus or necessary to our realization of material revenues. Any failure to obtain necessary technologies or raw materials could require PreGen-Plus to be re-configured which could interrupt the testing service entirely, negatively impact its commercial sale and increase the costs associated with PreGen-Plus, any one of which could have a material adverse affect on our revenues and gross margin, respectively.

If we cannot successfully amend our license agreement with LabCorp, we may be required to reimburse LabCorp for past ($2.4 million as of December 31, 2006), and future amounts (up to an additional $1.8 million) in connection with royalty payments made by LabCorp to a third party in order to secure intellectual property required to run PreGen-Plus.

LabCorp currently maintains a license with a third party for access to certain intellectual property that is integrated as part of the PreGen-Plus testing process. Under the terms of our amended license agreement with LabCorp, we are contingently liable to reimburse LabCorp for a portion of certain fixed, third-party royalty payments made by LabCorp to this third party based on sales volume of PreGen-Plus over the exclusive period of the license agreement, which terminates on August 13, 2008. As of December 31, 2006, the potential reimbursement to LabCorp was $2.4 million. Although a significant increase in PreGen-Plus test sales volumes through August 13, 2008, could reduce this obligation, potentially to zero, test volumes consistent with historical PreGen-Plus sales levels would result in an increase, rather than a decrease, in the amounts payable to LabCorp of up to an additional $1.8 million, bringing the total potential royalty amount to $4.2 million. In addition, if stool-based DNA screening for colorectal cancer is not included in colorectal cancer screening guidelines of the major guidelines organizations, LabCorp may request payment of the outstanding third party royalty amount. LabCorp has not requested reimbursement of this royalty amount under the license agreement and we are currently in discussions with LabCorp regarding the terms of the license agreement, including our contingent liability for such reimbursement. There can be no assurance that sales volumes will increase to a level necessary to materially reduce this obligation to LabCorp nor can there be any assurance that we will be able to successfully negotiate an amendment to the license agreement that would eliminate our contingent liability to pay the amounts described above.

If our clinical studies do not prove the superiority, reliability, or effectiveness of stool-based DNA testing, we may experience reluctance or refusal on the part of guidelines writers to include stool-based DNA testing within screening guidelines as well as a reluctance or refusal on the part of physicians to order, and third-party payors to pay for tests based on PreGen-Plus.

If the results of our research and clinical studies do not convince third party payors, physicians, thought leaders and colorectal cancer screening guideline writers of the clinical value of PreGen-Plus or other stool-based DNA testing services utilizing our technologies, we and LabCorp may never successfully commercialize such testing services and, as a consequence, we may not be able to remain a viable business. For instance, the point sensitivity from our 5,500 asymptomatic multi-center study in 2003 was lower than that seen in our previous research and clinical studies. Moreover, in connection with a preliminary review of data from a study conducted by the Mayo Clinic of the original bead-based version of our technology Hemoccult II and Hemoccult Sensa appeared to have outperformed, at a preliminary stage, our original technology in the detection of cancer among the thirteen cancer samples collected in the study up to that

point. We believe that the sample collection protocols used in this study, which were the same as those used in our multi-center study, resulted in DNA degradation that, in turn, resulted in lower sensitivity of our technology. Thought-leading gastroenterologists, guidelines organizations, primary care physicians, payors and others may, despite the small sample size referenced above, assign significance to this preliminary data, especially if published by the NCI or Mayo Clinic, which may significantly adversely affect continued commercialization of the testing service.

In addition, in a recent research study that we conducted, designed to test the efficacy of technological advances to enhance colorectal cancer detection in stool, Version 2 of our stool-based DNA screening technology demonstrated sensitivity and specificity results of 88% and 82%, respectively for detecting colorectal cancer. While previous published studies for stool-based DNA screening have generally shown specificity above 90%, the specificity results of 82%, may not be deemed clinically or commercially acceptable. There can be no assurance that the overall performance characteristics, or that the design of the Version 2 research study, will be viewed favorably by thought-leaders, physicians, and consumers or that LabCorp will be able to achieve similar levels of performance in future versions of its PreGen-Plus testing service. The blinded study was designed to test the efficacy of technological advances to enhance colorectal cancer detection in stool. This study involved the analysis of cancer samples from individuals whose colonoscopy results were positive for colorectal cancer. By contrast, our multi-center study, published in the *New England Journal of Medicine* in 2004, was comprised of cancer samples from an asymptomatic population. There can be no assurance that the population from which the cancer samples were obtained for the Version 2 study will be viewed as sufficient to support clinical or market acceptance of the Version 2 research study results.

If the results of our research and clinical studies, including the results of the Mayo Clinic study (especially in contrast to the results of the 2003 multi-center study referenced above), do not convince thought-leading gastroenterologists, guidelines organizations, primary care physicians, third party payors and patients that tests using our technologies are reliable, effective and/or superior to existing screening methods, including Hemoccult II, Hemoccult Sensa and immunochemical FOBT, or show that our technologies are superior but not by a large enough margin to affect prevailing clinical practice, we may experience reluctance or refusal on the part of screening guidelines writers to include stool-based DNA screening in such guidelines, including within the guidelines of the ACS/MSTF-CRC, as well as a reluctance or refusal on the part of physicians to order, and third-party payors to pay for tests using our technologies, which could slow the demand for, and successful commercialization of, PreGen-Plus.

If PreGen-Plus cannot be effectively sold at a price acceptable to the market or acceptable to the writers of screening guidelines, the successful commercialization of PreGen-Plus would be materially harmed.

The success of PreGen-Plus, and future versions of PreGen-Plus depends, in material part, on the ability of LabCorp to price the test at a level acceptable to consumers, physicians, third-party payors, and the writers of colorectal cancer screening guidelines. Currently, screening for colorectal cancer using our technologies is more expensive than FOBT because it is labor-intensive and uses highly complex processes and expensive reagents. The price differential between stool-based DNA testing and FOBT, when compared with the performance differential between the two screening modalities, may be viewed as too significant to endorse stool-based DNA screening for guidelines inclusion. In order to make PreGen-Plus less costly and more commercially attractive to consumers, physicians, third party payors, and guidelines writers, LabCorp will need to reduce the costs of tests using our technologies through significant automation of key operational processes or other cost savings procedures. There can be no assurance that such parties, including Medicare, will pay for PreGen-Plus at levels that will enable us to earn a profit, if at all and there can be no assurance that stool-based DNA testing will be included within screening guidelines, regardless of the performance of the technology. If LabCorp fails to create and improve technologies that sufficiently reduce costs, LabCorp s sales of PreGen-Plus and, as a result, our revenues may be limited. Moreover, if LabCorp is unable to sell a sufficient number of tests at favorable pricing levels, we will not be successful and we may not be able to remain viable as a company.

If our or LabCorp s technological advancements do not increase the performance of PreGen-Plus in a cost effective manner, the demand for PreGen-Plus may be negatively impacted.

We continue to work to improve the performance characteristics of stool-based DNA testing through research on technical innovations. However, there can be no assurance that future generations of PreGen-Plus, or the commercial version of the PreGen-Plus test currently offered by LabCorp will have sufficient sensitivity and specificity or performance to be commercially successful. There also can be no assurance that the sample handling protocols employed by LabCorp for PreGen-Plus are adequate to prevent DNA degradation and resulting negative impacts on test performance. If the current commercial version or future generations of the PreGen-Plus test do not demonstrate a sufficiently significant increase in the sensitivity or performance over that of the original technology in a cost effective manner, sufficient demand for our stool-based DNA screening technologies may never be realized or such demand could be significantly reduced, either of which would have a material adverse affect on our revenues.

If an insufficient number of medical practitioners order and reorder tests using our technologies, our revenue and profitability will be limited.

If a sufficient number of medical practitioners are not convinced to order and reorder PreGen-Plus, we will not become profitable. An important element to the successful commercialization of PreGen-Plus is the inclusion of stool-based DNA testing in colorectal cancer screening guidelines, including the guidelines of the ACS/MSTF-CRC. Gastroenterologists and primary care physicians will have to be made aware of the benefits of stool-based DNA testing through published papers, presentations at scientific conferences, favorable results from clinical studies and obtaining reimbursement from insurers. Our failure to be successful in these efforts or to be included within colorectal cancer screening guidelines would make it difficult to convince medical practitioners to order and reorder PreGen-Plus for their patients which would limit our revenues and materially adversely affect our business.

We may experience limits on our revenue if only a small number of people decide to be screened for colorectal cancer using our technologies.

Even if our technologies are superior to other colorectal cancer screening options, adequate third-party reimbursement is obtained and we convince medical practitioners to order tests using our technologies, only a small number of people may decide to be screened for colorectal cancer. Despite the availability of current colorectal cancer screening methods as well as the recommendations of the ACS that all Americans over the age of 50 be screened for colorectal cancer, a majority of these individuals do not complete a colorectal cancer screening test. If only a small portion of the recommended population is regularly screened for colorectal cancer or decides to utilize colorectal cancer screening tests using our technologies, we will, despite our efforts, experience limits on our revenue and our business would be materially harmed.

We may be subject to substantial costs and liability or be prevented from licensing our technologies for cancer detection as a result of litigation or other proceedings relating to patent rights.

Third parties may assert infringement or other intellectual property claims against our licensors, our licensees, our suppliers, our strategic partners, or us. We pursue a patent strategy that we believe provides us with a competitive advantage in the non-invasive early detection of colorectal cancer and is designed to maximize our patent protection against third parties in the U.S. and, potentially, in certain foreign countries. We have filed patent applications that we believe cover methods we have designed to help detect colorectal cancer and other cancers. In order to protect or enforce our patent rights, we may have to initiate actions against third parties. Any actions regarding patents could be costly and time-consuming, and divert our management and key personnel from our business. Additionally, such actions could result in challenges to the validity or applicability of our patents. Because the U.S. Patent & Trademark Office maintains patent applications in secrecy until a patent application publishes or the patent is issued, others may have filed patent applications covering technology used by us or our partners. Additionally, there may

be third-party patents, patent applications and other intellectual property relevant to our technologies that may block or compete with our technologies. Even if third-party claims are without merit, defending a lawsuit may result in substantial expense to us and may divert the attention of management and key personnel. In addition, we cannot provide assurance that we would prevail in any of these suits or that the damages or other remedies, if any, awarded against us would not be substantial. Claims of intellectual property infringement may require that we, or our strategic partners, enter into royalty or license agreements with third parties that may not be available on acceptable terms, if at all. These claims may also result in injunctions against the further development and commercial sale of PreGen-Plus, which would have a material adverse affect on our business, financial condition and results of operations.

Also, patents and applications owned by us may become the subject of interference proceedings in the United States Patent and Trademark Office to determine priority of invention, which could result in substantial cost to us, as well as a possible adverse decision as to the priority of invention of the patent or patent application involved. An adverse decision in an interference proceeding may result in the loss of rights under a patent or patent application subject to such a proceeding.

If we are unable to protect our intellectual property effectively, we may be unable to prevent third parties from using our intellectual property, which would impair our competitive advantage.

We rely on patent protection as well as a combination of trademark, copyright and trade secret protection, and other contractual restrictions to protect our proprietary technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. If we fail to protect our intellectual property, we will be unable to prevent third parties from using our technologies and they will be able to compete more effectively against us.

As of December 31, 2006 we have 37 issued patents and 18 pending patent applications in the United States and we also have 75 issued foreign patents and 49 pending foreign patent applications. We cannot assure you that any of our currently pending or future patent applications will result in issued patents, and we cannot predict how long it will take for such patents to be issued. Further, we cannot assure you that other parties will not challenge any patents issued to us, or that courts or regulatory agencies will hold our patents to be valid or enforceable. A third party has opposed one of our issued European patents relating to the enumerative analysis of nucleic acids in biological samples. A third-party institution is a co-owner of one of our issued patents relating to pooling patient samples in connection with our loss of heterozygosity detection method. We cannot guarantee you that we will be successful in defending challenges made in connection with our patents and patent applications. Any successful third-party challenge to our patents could result in co-ownership of such patents with a third party or the unenforceability or invalidity of such patents. In addition, we have jointly filed and jointly own, with a third party institution, a pending US patent application and a PCT patent application that has been nationalized and is pending in Canada, Europe, and Japan, which patent applications relate to the use of various DNA markers, including one of our detection methods, to detect cancers of the lung, pancreas, esophagus, stomach, small intestine, bile duct, naso-oro-pharyngeal airways, liver, and gall bladder in stool. As joint owners of these patent applications, both we and the third party institution have the rights provided to joint owners under applicable patent law, including the right to use, transfer, and license the patent rights.

In addition to our patents, we rely on contractual restrictions to protect our proprietary technology. We require our employees and third parties to sign confidentiality agreements and employees to sign agreements assigning to us all intellectual property arising from their work for us. Nevertheless, we cannot guarantee that these measures will be effective in protecting our intellectual property rights.

We cannot guarantee that the patents issued to us will be broad enough to provide any meaningful protection nor can we assure you that one of our competitors may not develop more effective technologies, designs or methods to test for colorectal cancer or any other common cancer without infringing our intellectual property rights or that one of our competitors might not design around our proprietary technologies.

Other companies may develop and market novel or improved methods for detecting colorectal cancer, which may make our technologies less competitive, or even obsolete.

The market for colorectal cancer screening is large, approximating 87 million Americans age 50 and above, of which we believe approximately one-half fail to strictly follow the ACS s screening guidelines for colorectal cancer. As a result, the colorectal cancer screening market has attracted competitors, some of which have significantly greater resources than we have. Currently, we face competition from procedure-based detection technologies such as flexible sigmoidoscopy, colonoscopy and virtual colonoscopy, a procedure being performed in which a radiologist views the inside of the colon through a scanner, as well as from existing guaic based fecal occult blood testing, or FOBT, and improved screening tests such as immunochemical FOBT. In addition, some companies and institutions are developing serum-based tests, or screening tests based on the detection of proteins, nucleic acids or the presence of fragments of mutated genes in the blood that are produced by colon cancer. These and other companies may also be working on additional methods of detecting colon cancer that have not yet been announced. We may be unable to compete effectively against these competitors either because their test is superior or because they may have more expertise, experience, financial resources and stronger business relationships.

We rely on third-party contract manufacturers and suppliers and may experience a scarcity of raw materials and components.

We have historically relied on contract manufacturers and suppliers for certain components for our technologies. We believe that there are relatively few manufacturers that are currently capable of supplying commercial quantities of the raw materials and components necessary for certain elements used in LabCorp s PreGen-Plus testing service. Although we have identified suppliers that we believe are capable of supplying these raw materials and components in sufficient quantity today, there can be no assurance that we, or LabCorp, will be able to enter into or maintain these agreements and relationships with such suppliers on a timely basis on acceptable terms, if at all. Furthermore, prior to August 2003, stool-based DNA testing had never been offered on a commercial scale, and there can be no assurance that the raw materials and components necessary to meet demand will be available in sufficient quantities or on acceptable terms, if at all. If we, or LabCorp, should encounter delays or difficulties in securing the necessary raw materials and components for LabCorp s PreGen-Plus testing service, LabCorp may need to reconfigure its PreGen-Plus testing service which would result in delays in commercialization or an interruption in sales and would materially adversely impact our revenues.

If we or our partners fail to comply with regulatory requirements, we may be subject to stringent penalties and our business may be materially adversely affected. The marketing and sale of PreGen-Plus is subject to various state, federal and foreign regulations. We cannot assure you that we or our strategic partners will be able to comply with applicable regulations and regulatory guidelines. If we or our partners fail to comply with any such applicable regulations and guidelines, we could incur significant liability and/or our partners could be forced to cease offering PreGen-Plus in certain jurisdictions. Also, conforming the marketing and sale of our technologies to any applicable regulations and guidelines could substantially increase our operating expenses. In addition, LabCorp and any other laboratory that uses PreGen-Plus are subject to the Clinical Laboratory Improvement Amendments of 1988, or CLIA. CLIA is a federal law which regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease. CLIA is intended to ensure the quality and reliability of clinical laboratories in the U.S. by mandating specific standards in the areas of personnel qualifications, administration, participation in proficiency testing, patient test management, quality control, quality assurance and inspections. If LabCorp were to lose its CLIA certification, it may no longer be able to offer PreGen-Plus, which would have a material adverse affect on our business.

Moreover, healthcare policy has been a subject of extensive discussion in the executive and legislative branches of the federal and many state governments. Development of the existing commercialization strategy for PreGen-Plus has been based on existing healthcare policies. Changes in healthcare policy

could substantially interrupt the sales of PreGen-Plus, increase costs, and divert management s attention. We cannot predict what changes, if any, will be proposed or adopted or the effect that such proposals or adoption may have on our business, financial condition and results of operations.

The loss of key members of our senior management team could adversely affect our business.

Our success depends largely on the skills, experience and performance of key members of our senior management team, including Don M. Hardison, our President and Chief Executive Officer. We have recently entered into an employment agreement with Mr. Hardison with an initial term through June 27, 2008, which provides for certain retention bonuses for his continued employment with the Company through such term. Notwithstanding this agreement, Mr. Hardison may terminate his relationship with us at any time. The efforts of Mr. Hardison will be critical to us as we continue to pursue our business goals. In addition, in October 2006 we reduced our workforce by 21 employees, or 48% of our staff. Although we have entered into retention agreements with our remaining officers and employees following the restructuring, if we were to lose any of these remaining officers or key employees, we may experience difficulties in competing effectively, developing our technologies and implementing our business strategies.

If we are unable to attract the expertise necessary to develop and seek regulatory approval for an in vitro diagnostic kit, we may not be able to bring more advanced technologies to market.

Recently we announced research results on Version 2 of our stool-based DNA screening technology that was realized utilizing a marker panel comprised of only two markers. We may seek to configure this test as an in vitro diagnostic kit and seek regulatory approval with the FDA. There can be no assurance that we will be able to hire the personnel necessary to develop this product, that we will have the clinical data necessary and sufficient to support an FDA filing, or that an FDA filing on such a product will ultimately be approved. If we cannot execute successfully in these areas, our introduction and commercialization of Version 2 of our technology may be delayed or may never occur. Moreover, transferring Version 2 from the laboratory to the commercial setting will require the negotiation and licensing of necessary third-party intellectual property as well as the likelihood of additional technical and clinical validations of the technology. There can be no assurance that such clinical or technical validations will be consistent with the above research results, that the Version 2 technology will perform equally well in all patient populations and segments, or that such technical and clinical validations will support the commercial introduction of Version 2. Moreover, there can be no assurance that the third-party intellectual property that is needed to commercially launch Version 2 can be obtained on favorable terms, if at all.

Our stock price may be volatile.

The market price of our common stock has fluctuated widely. Consequently, the current market price of our common stock may not be indicative of future market prices and we may be unable to sustain or increase the value of an investment in our common stock.

Our common stock is listed on the NASDAQ Global Market under the symbol EXAS. Factors affecting our stock price may include:

- whether stool-based DNA screening is included in colorectal cancer screening guidelines, its positioning within those guidelines and the timing of any such inclusion;
- FDA regulation of our or LabCorp s products and services;
- technological innovations or new products and services by us or our competitors;
- clinical trial results relating to the PreGen-Plus test, stool-based DNA testing in general, or technologies of our competitors;
- stool DNA screening becoming a standard of care among prescribing physicians;

- reimbursement decisions by Medicare and other third party payors;
- the establishment of collaborative partnerships;
- health care legislation;
- intellectual property disputes and other litigation;
- additions or departures of key personnel;
- the performance characteristics of our technologies;
- general market conditions;
- the rate of market acceptance of PreGen-Plus; and
- sales of our common stock or debt securities.

Because we are a company with no significant operating revenue, you may consider any one of these factors to be material.

Our operating results may fluctuate, which may adversely affect our share price.

Fluctuations in our operating results may lead to fluctuations, including declines, in our share price. Our operating results may fluctuate from period to period due to a variety of factors, including:

- demand by physicians and consumers for PreGen-Plus;
- new technology introductions;
- reimbursement acceptance success;
- changes in our agreement with LabCorp;
- the number and timing of milestones that we achieve may under collaborative agreements;
- impairment of our intellectual property;
- the level of our development activity conducted for, and our success in commercializing these developments; and
- the level of our spending on PreGen-Plus commercialization efforts, licensing and acquisition initiatives, clinical studies, and internal research and development.

Variations in the timing of our future revenue and expenses could also cause significant fluctuations in our operating results from period to period and may result in unanticipated earning shortfalls or losses. In addition, The NASDAQ Global Market in general, and the market for biotechnology companies in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies.

If we lose the support of our key scientific collaborators, it may be difficult to establish tests using our technologies as a standard of care for colorectal cancer screening, which may limit our revenue growth and profitability.

We have established relationships with leading scientists, including members of our scientific advisory board, and research and academic institutions, such as Mayo Clinic, John Hopkins University and Case Western Reserve University, that we believe are key to establishing tests using our technologies as a standard of care for colorectal cancer screening. If our collaborators determine that colorectal cancer screening tests using our technologies are not appropriate options for colorectal cancer screening, or superior to available colorectal cancer screening tests, or that alternative technologies would be more effective in the early detection of colorectal cancer, we would encounter significant difficulty establishing

tests using our technologies as a standard of care for colorectal cancer screening, which would limit our revenue growth and profitability.

Our inability to apply our proprietary technologies successfully to detect other common cancers may limit our future revenue growth and profitability.

While, to date, we have focused substantially all of our research and development efforts on colorectal cancer, we have used our technologies to detect cancers of the lung, pancreas, esophagus, stomach and gall bladder. In the future, we intend to evaluate and potentially extend our technology platform to the development of screening tests for these or other common cancers. To do so, we may need to overcome technological challenges to develop reliable screening tests for these cancers. There can be no assurance that our technologies will be capable of reliably detecting cancers, beyond colorectal cancer, with the sensitivity and specificity necessary to be clinically and commercially useful for such other cancers, or that we can develop such technologies at all. We may never realize any commercial benefit from our research and development activities.

Product liability suits against us could result in expensive and time-consuming litigation, payment of substantial damages and increases in our insurance rates.

The sale and use of products or services based on our technologies, or activities related to our research and clinical studies, could lead to the filing of product liability claims if someone were to allege that one of our products contained a design or manufacturing defect which resulted in the failure to detect the disease for which it was designed. A product liability claim could result in substantial damages and be costly and time consuming to defend, either of which could materially harm our business or financial condition. We cannot assure you that our product liability insurance would protect our assets from the financial impact of defending a product liability claim. Any product liability claim brought against us, with or without merit, could increase our product liability insurance rates or prevent us from securing insurance coverage in the future.

Certain provisions of our charter, by-laws and Delaware law may make it difficult for you to change our management and may also make a takeover difficult.

Our corporate documents and Delaware law contain provisions that limit the ability of stockholders to change our management and may also enable our management to resist a takeover. These provisions include a staggered board of directors, limitations on persons authorized to call a special meeting of stockholders and advance notice procedures required for stockholders to make nominations of candidates for election as directors or to bring matters before an annual meeting of stockholders. These provisions might discourage, delay or prevent a change of control in our management. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors and cause us to take other corporate actions. In addition, the existence of these provisions, together with Delaware law, might hinder or delay an attempted takeover other than through negotiations with our board of directors.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 31, 2006, we occupied approximately 37,000 square feet of space in our headquarters located in Marlborough, Massachusetts under a lease which expires in July 2010. We believe that these facilities will be adequate to meet our space requirements for the foreseeable future.

Item 3. Legal Proceedings

From time to time we are a party to various legal proceedings arising in the ordinary course of our business. The outcome of litigation cannot be predicted with certainty and some lawsuits, claims or proceedings may be disposed of unfavorably to us. Intellectual property disputes often have a risk of injunctive relief which, if imposed against us, could materially and adversely affect our financial condition, or results of operations. From time to time, third parties have asserted and may in the future assert intellectual property rights to technologies that are important to our business and have demanded and may in the future demand that we license their technology. We are not currently a party to any pending litigation that we believe is likely to have a material adverse effect on our business operations or financial condition.

Item 4. Submission of Matters to a Vote of Security Holders

No matters were submitted to a vote of security holders during the fourth quarter of fiscal 2006.

PART II

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

Our common stock is listed on the NASDAQ Global Market under the symbol EXAS. The following table provides, for the periods indicated, the high and low sales prices per share as reported on the NASDAQ Global Market.

	High	Low
2006		
First quarter	$ 4.97	$ 2.16
Second quarter	3.40	2.05
Third quarter	3.09	1.53
Fourth quarter	3.04	1.71
2005		
First quarter	$ 4.83	$ 2.99
Second quarter	3.69	2.05
Third quarter	2.75	1.77
Fourth quarter	2.50	1.34

As of December 31, 2006, there were approximately 26,777,813 shares of our common stock outstanding held by approximately 80 holders of record.

We have never paid any cash dividends on our capital stock and do not plan to pay any cash dividends in the foreseeable future.

During the quarter ended December 31, 2006, there were no repurchases made by us or on our behalf, or by any affiliated purchaser, of shares of our common stock registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended.

Equity Compensation Plan Information

We maintain the following three equity compensation plans under which our equity securities are authorized for issuance to our employees and/or directors; the 1995 Stock Option Plan, the 2000 Stock Option and Incentive Plan and the 2000 Employee Stock Purchase Plan. Each of the foregoing equity compensation plans was approved by our stockholders. The following table presents information about these plans as of December 31, 2006.

Plan Category	Number Of Securities To Be Issued Upon Exercise Of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price Of Outstanding Options, Warrants And Rights	Number of Securities Remaining Available For Future Issuance Under Equity Compensation Plans (Excluding Securities Outstanding)
Equity compensation plans approved by security holders	4,125,940	$ 5.69	2,494,545
Equity compensation plans not approved by security holders	None	None	None
Total	4,125,940	$ 5.69	2,494,545

No further grants are being made under the 1995 Stock Option Plan.

Item 6. Selected Financial Data

The selected historical financial data set forth below as of December 31, 2005 and 2006 and for the years ended December 31, 2004, 2005 and 2006 are derived from our financial statements, which have been audited by Ernst & Young LLP, independent registered public accountants and which are included elsewhere in this Form 10-K. The selected historical balance sheet financial data as of December 31, 2002, 2003 and 2004 and statements of operations data for the years ended December 31, 2002 and 2003 are derived from our audited financial statements not included elsewhere in this Form 10-K.

The selected historical financial data should be read in conjunction with, and are qualified by reference to Management s Discussion and Analysis of Financial Condition and Results of Operations, our financial statements and notes thereto and the report of independent registered public accountants included elsewhere in this Form 10-K.

	Year Ended December 31,				
	2002	2003	2004	2005	2006
	(In thousands, except per share data)				
Statements of Operations Data:					
Revenue:					
Product royalty fees	$	$ 8	$ 166	$ 206	$ 179
License fees	886	2,871	4,514	3,828	4,363
Product	11	22	255	216	208
	897	2,901	4,935	4,250	4,750
Cost of revenue	9	22	487	566	809
Gross profit	888	2,879	4,448	3,684	3,941
Operating expenses:					
Research and development (1)	20,467	17,333	11,122	7,956	6,735
Sales and marketing (1)	4,172	7,363	5,697	5,777	4,433
General and administrative (1)	7,094	7,021	6,824	4,959	6,269
Restructuring				626	671
	31,733	31,717	23,643	19,318	18,108
Loss from operations	(30,845)	(28,838)	(19,195)	(15,634)	(14,167)
Interest income	962	498	672	1,114	1,252
Net loss	$ (29,883)	$ (28,340)	$ (18,523)	$ (14,520)	$ (12,915)
Net loss per share:					
Basic and diluted	$ (1.62)	$ (1.50)	$ (0.73)	$ (0.55)	$ (0.49)
Weighted average common shares outstanding:					
Basic and diluted	18,433	18,911	25,334	26,270	26,509
Balance Sheet Data:					
Cash and cash equivalents	$ 16,433	$ 13,189	$ 12,077	$ 11,987	$ 4,831
Marketable securities	26,407	13,606	37,188	21,112	16,244
Total assets	50,086	34,681	56,111	37,845	23,868
Total liabilities	11,737	22,453	18,128	13,224	8,910
Stockholders equity	38,349	12,228	37,983	24,621	14,958

(1) Non-cash stock-based compensation expense included in these amounts are as follows:

	2002	2003	2004	2005	2006
Research and development	$ 478	$ 249	$ 221	$ 113	$ 653
Sales and marketing				159	1,089
General and administrative	1,565	869	277	233	1,264
Total	$ 2,043	$ 1,118	$ 498	$ 505	$ 3,006

Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations

The information contained in this section has been derived from our consolidated financial statements and should be read together with our consolidated financial statements and related notes included elsewhere in this Form 10-K.

Overview

EXACT Sciences Corporation develops proprietary DNA-based technologies for use in the detection of cancer. We have selected colorectal cancer as the first application of our technologies. We have licensed certain of our technologies, including improvements to such technologies, on an exclusive basis through August 2008 to Laboratory Corporation of America® Holdings (LabCorp®) for use in a commercial testing service developed by LabCorp and marketed under the name PreGen-Plus . PreGen-Plus is a non-invasive, stool-based DNA testing service for the detection of colorectal cancer in the average-risk population. Since our inception in February 1995, our principal activities have included:

- researching and developing our technologies for colorectal cancer screening, including PreGen-Plus and our next generation Version 2 technology;
- conducting clinical studies to validate our colorectal cancer screening technologies;
- negotiating licenses for intellectual property of others;
- developing relationships with opinion leaders in the scientific and medical communities;
- conducting market studies and analyzing various markets for our technologies;
- raising capital;
- licensing our proprietary technologies to LabCorp;
- working to further the adoption of stool-based DNA testing for colon cancer, including seeking inclusion of such technology in the guidelines of the major guidelines organizations;
- working with LabCorp on activities in support of the commercialization of PreGen-Plus; and
- sales and marketing efforts in support of PreGen-Plus.

We have generated limited operating revenues since our inception and, as of December 31, 2006, we had an accumulated deficit of approximately $150.8 million. Our losses have historically resulted from costs incurred in conjunction with our research and development initiatives, salaries and benefits associated with the hiring of personnel, the initiation of marketing programs and the build-out of our sales infrastructure to support the commercialization and marketing of PreGen-Plus. We expect that our losses will continue for the next several years as a result of continuing research, development, sales and marketing expenses.

LabCorp launched PreGen-Plus commercially in August 2003. From the date of launch through December 31, 2006, LabCorp had accessioned approximately 12,500 PreGen-Plus samples, including approximately 4,300, 4,000 and 3,700 samples, during the years ended December 31, 2004, 2005 and 2006, respectively. To achieve sufficient demand for PreGen-Plus, we believe that stool-based DNA testing must be included in colorectal cancer screening guidelines of the major guidelines organizations (including the guidelines of the American Cancer Society, (the ACS), and the U.S. Multisociety Task Force on Colorectal Cancer, a consortium of several organizations including representatives of the American College of Gastroenterology, American Gastroenterological Association, American Society for Gastrointestinal Endoscopy and American College of Physicians/Society of Internal Medicine (the MSTF-CRC), together the ACS/MSTF-CRC) and that substantial funds will likely need to be invested in sales and marketing efforts over the next several years. We do not have, and we cannot assure you that LabCorp will devote, the funds that we believe are likely necessary to build sufficient demand for PreGen-

Plus. Even if stool-based DNA screening is included in colorectal cancer screening guidelines and sufficient amounts are invested in sales and marketing efforts, our success will also depend upon a number of factors that are largely out of our control, including the following:

- the positioning of stool-based DNA screening within guidelines such that it is not limited among the screening options offered;

- the regulatory requirements for, and any regulatory restrictions placed upon, PreGen-Plus or any other product based on our technologies, and the timing of any required regulatory filings and approval processes;

- whether LabCorp continues to offer PreGen-Plus commercially;

- acceptance, endorsement and formal policy approval of stool-based DNA screening for reimbursement by Medicare and other third-party payors;

- effective LabCorp sales and sales management personnel and processes to educate physicians and their staffs regarding PreGen-Plus and patient compliance;

- our success in educating third-party payors, managed care organizations, and technology assessment groups regarding stool-based DNA screening;

- effective negotiation and contracting by LabCorp with Medicare and other third-party payors for coverage and reimbursement of PreGen-Plus;

- patient acceptance of PreGen-Plus, including its novel sample collection process;

- stool-based DNA screening becoming a standard of care among prescribing physicians; and

- the quality and service of the LabCorp testing process.

Until such time as some or all of the factors outlined above are in place, we do not expect material revenue growth. Our revenue is comprised of product royalty fees on PreGen-Plus tests sold by LabCorp, product revenue from the sale to LabCorp of Effipure components, which are used by LabCorp in processing PreGen-Plus tests, and the amortization of license fees for the licensing of product rights to LabCorp under our strategic license agreements. We expect that product royalty fees and license fee revenue for 2007 will be substantially consistent with amounts recorded in 2006. LabCorp informed the FDA during 2006 that they were working on changes to PreGen-Plus that could eliminate the use of Effipure in PreGen-Plus. We, therefore, do not expect to record material revenues from the sale of Effipure components to LabCorp during 2007. The potential loss of this revenue beginning in 2007 is not expected to have a material impact on our gross margins because, under our agreement with LabCorp, our Effipure sales to LabCorp resulted in no gross margin as LabCorp reimbursed us only for our costs to provide Effipure to them.

We account for PreGen-Plus royalty fees on a cash basis and until such time as we have sufficient historical reimbursement data necessary to estimate and record our product royalty fees on an accrual basis, we will continue to recognize revenue from product royalty fees on a cash basis. While LabCorp has received payment on approximately 50% of the PreGen-Plus tests accessioned by LabCorp to date, laboratory operating factors such as turnaround times for the testing process, possible pre- and post-analytical sample and sample processing deficiencies and third-party reimbursement all influence the timing and whether an accession by LabCorp will eventually be recognized as revenue by us.

On October 17, 2006, we initiated a plan to reduce our cost structure by eliminating 21 positions, or 48% of our staff, across all departments to reduce expenses. Since this workforce reduction, our efforts have focused on the pursuit of inclusion of stool-based DNA testing in screening guidelines of the major guidelines organizations, including the guidelines of the ACS/MSTF-CRC, Medicare coverage pursuit for stool-based DNA testing, and optimization and validation of our Version 2 technology.

Pursuant to the restructuring plan, we accrued charges of $0.7 million in the quarter ended December 31, 2006 in connection with one-time employee termination benefits, including severance, outplacement and fringe benefits. We continue to assess our facility needs and could incur additional restructuring charges, in the form of write-offs of leasehold improvements or other fixed assets, in the event facilities are consolidated. Until its facility plans are finalized, we can not currently estimate the amount of those charges, if any.

Research and development expenses include costs related to scientific and laboratory personnel, research and clinical studies and reagents and supplies used in the development of our technologies and, effective as of January 1, 2006, non-cash stock-based compensation related to the amortization of the fair value of stock option awards granted to employees. As a result of restructuring our operations, we expect that our research and development costs in 2007 will be lower than 2006 levels. Our research and development efforts in 2007 will focus on the validation and optimization of the next generation of our colorectal cancer screening technology, or Version 2 of our technology. While we have taken steps to lower research and development costs by focusing on Version 2 of our technology, we may need to invest substantial funds in additional research, design and development to successfully commercialize our Version 2 technology or other potential future products.

Selling, general and administrative expenses consist primarily of non-research personnel salaries, office expenses, professional fees and, as of January 1, 2006, non-cash stock-based compensation related to the amortization of the fair value of stock option awards granted to employees. We expect sales and marketing expenses in 2007 to be lower than 2006 levels primarily as a result of lower headcount and external promotional spending. We expect general and administrative expenses in 2007 to be consistent with 2006 levels.

In connection with our October 2006 restructuring, we entered into employment retention agreements with our 22 remaining employees, which provide for severance and a one-time retention bonus in the aggregate amount of approximately $0.9 million payable on December 31, 2007 (subject to acceleration in certain circumstances), provided that they continue to be employed on the date of payment. The retention agreements also provide that upon the occurrence of certain triggering events, such as a change of control or termination without cause, remaining employees will be entitled to receive any unpaid retention bonus and severance payments for periods ranging from three to twelve months at a rate equal to their base salary at the time of termination of employment. In addition, in June 2006, we entered into an employment agreement with Don M. Hardison, our President and Chief Executive Officer, under which he is eligible to earn an annual retention bonus in the amount of $0.2 million payable on each of January 1, 2007 and January 1, 2008, provided that he continues to be employed by on the date of payment. As of December 31, 2006, we had accrued approximately $0.4 million in compensation costs in connection with the retention bonuses for the remaining employees and Mr. Hardison. We intend to accrue the remaining cost of the retention bonuses, currently estimated to be approximately $0.9 million, on a straight line basis over the remaining retention period, which ends on December 31, 2007. See note 5 of the notes to our condensed consolidated financial statements contained in Item 8 of this Annual Report on Form 10-K for a description of the employment agreement between the Company and Don M. Hardison.

Significant Accounting Policies

This management s discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements as well as the reported revenues and expenses during the reporting periods. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition and intangible assets. We base our estimates on historical experience and on various other factors that are believed to be appropriate under the circumstances, the results of which form the basis for making judgments about the carrying value of assets

and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in note 2 to our consolidated financial statements included in this report, we believe that that the following accounting policies and judgments are most critical to aid in fully understanding and evaluating our reported financial results.

Revenue Recognition. License fees for the licensing of product rights on initiation of strategic agreements are recorded as deferred revenue upon receipt and recognized as revenue on a straight-line basis over the license period.

Product royalty fees on PreGen-Plus tests performed by LabCorp are recorded as revenue when cash payments are received from LabCorp pursuant to our license agreement with LabCorp. Product royalty fees ultimately due to us are based upon the customer s remittance to LabCorp, not the amount billed. Until such time as we have sufficient historical reimbursement data necessary to estimate and record our product royalty fees on an accrual basis, we will continue to recognize revenue from product royalty fees on a cash basis.

Product revenue from the sale of certain components of our Effipure technology to LabCorp is recognized upon transfer of the components provided that title passes, the price is fixed or determinable and collection of the receivable is probable. We bear the risk of obsolescence related to the Effipure inventory.

Revenue from milestone and other performance-based payments, if any, is recognized as revenue when the milestone or performance is achieved and collection of the receivable is estimable and probable.

Patent Costs. Patent costs are capitalized as incurred and are amortized beginning when patents are issued over an estimated useful life of five years. Capitalized patent costs are expensed upon disallowance of the patent, upon a decision by us to no longer pursue the patent, or when the related intellectual property is deemed to be no longer of value to us.

We apply SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets and for Long-Lived Assets* (SFAS No. 144), which requires us to continually evaluate whether events or circumstances have occurred that indicate that the estimated remaining useful life of long-lived assets and certain identifiable intangibles may warrant revision or that the carrying value of these assets may be impaired. Such events may include whether stool-based DNA screening is included in colorectal cancer screening guidelines or a change in the regulatory requirements for PreGen-Plus. We did not record any impairment charges during the year ended December 31, 2006.

We believe that full consideration has been given to all relevant circumstances that we may be subject to, and the financial statements accurately reflect our best estimate of the results of operations, financial position and cash flows for the periods presented.

Stock-Based Compensation. Prior to January 1, 2006, we accounted for stock-based compensation plans under the provisions of Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* (APB No. 25). We adopted SFAS No. 123 (revised 2004), *Share-Based Payment* (SFAS No. 123(R)) effective January 1, 2006 using the modified prospective transition method. SFAS No. 123(R) requires all share-based payments to employees, including grants of employee stock options and shares purchased under an employee stock purchase plan (if certain parameters are not met), to be recognized in the financial statements based on their fair values. SFAS No. 123(R) did not change the accounting guidance for share-based payment transactions with parties other than employees provided in SFAS No. 123, *Accounting for Stock Based Compensation* (SFAS No.123), as originally issued and Emerging Issues Task Force (EITF) 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services.*

Under the modified prospective transition method, we recognized stock-based compensation expense during the year ended December 31, 2006 in connection with: (a) stock options and restricted stock awards

granted and employee stock purchase plan awards with offering periods commencing prior to, but not yet vested, as of January 1, 2006, based on the grant-date fair value estimated in accordance with the original provisions of SFAS No. 123, (b) stock options and restricted stock awards granted and employee stock purchase plan awards with offering periods commencing subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123(R) and (c) stock options (including awards which were fully vested as of January 1, 2006) which were modified during the year ended December 31, 2006. Under the modified prospective transition method, results for prior periods are not restated. As a result of the adoption of SFAS No. 123(R), we recorded incremental stock-based compensation expense of $2.6 million in connection with the foregoing in our consolidated statements of operations for the year ended December 31, 2006.

Total stock-based compensation recorded during the year ended December 31, 2006 of $3.0 million included $0.4 million recorded in connection with common stock to be issued to a collaborator, stock options and restricted stock awards granted to non-employee consultants and directors as well as stock-based compensation expense related to the Company s 2006 401(k) match which, if approved by our board of directors, is made annually in Company common stock. Prior to the adoption of SFAS No. 123(R) on January 1, 2006, in accordance with APB No. 25, we recognized expenses related to non-employee consultant stock option grants and restricted stock awards and our 401(k) match in our consolidated statements of operations.

The amounts in the table below represent solely the impact of expenses recorded in our consolidated statements of operations in connection with employee and director stock option grants and the 2000 Purchase Plan in accordance with SFAS No. 123(R). Common stock to be issued to a collaborator, non-employee consultant stock option grants, restricted stock awards and our 2006 401(k) match are accounted for similarly under both APB No. 25 and SFAS No. 123(R) and are therefore excluded from the table below.

(in thousands)	**Year Ended December 31, 2006**
Research and development	$ 430
Sales and marketing	1,002
General and administrative	1,178
	$ 2,610

As a result of adopting SFAS No. 123(R) on January 1, 2006, our loss from operations, as well as our net loss, for the year ended December 31, 2006 was $2.6 million higher than if we had continued to account for stock-based compensation under APB No. 25. Basic and diluted loss per share for the year ended December 31, 2006 was $0.10 higher than if we had continued to account for stock-based compensation under APB No. 25.

As of December 31, 2006, there was $1.7 million of total unrecognized compensation cost related to non-vested share-based compensation arrangements granted under all equity compensation plans. Total unrecognized compensation cost will be adjusted for future changes in forfeitures. We expect to recognize that cost over a weighted average period of 1.4 years.

Determining Fair Value

Valuation and Amortization Method The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model based on the assumptions in the following table. The estimated fair value of employee stock options is amortized to expense using the straight-line method over the vesting period.

Expected Term We use the simplified calculation of expected life, described in the SEC s Staff Accounting Bulletin 107, as we do not currently have sufficient historical exercise data on which to base an

estimate of expected term. This method allows us to estimate the expected life using the average of the vesting period and the contractual life of the stock options granted.

Expected Volatility Expected volatility is based on our historical volatility from the time of our initial public offering in January of 2001 through the measurement date of the awards. Expected volatility was lower in the year ended December 31, 2006 when compared to the same period of 2005 as we refined our expectation because, as of January 2006, we had at least five years of historical volatility data on which to base our expectation. Prior to January 1, 2006, sufficient historical volatility data did not exist to reasonably justify a lower expected volatility, and we based volatility in those periods on peer analysis.

Risk-Free Interest Rate We base the risk-free interest rate used in the Black-Scholes valuation method on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent remaining term.

Forfeitures As required by SFAS No. 123(R), we record share-based compensation expense only for those awards that are expected to vest. We do not need to estimate forfeitures because all share based awards vest monthly.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model based on the assumptions in the following table.

	December 31, 2004		**2005**		**2006**	
Option Plan Shares						
Risk-free interest rates	1.69% - 3.04	%	3.94% - 4.06	%	4.59% - 5.03	%
Expected term (in years)	7		7		6	
Expected volatility	100	%	100	%	70	%
Dividend yield	0	%	0	%	0	%
Weighted average fair value per share of options granted during the period	$4.27		$3.21		$1.67	
ESPP Shares						
Risk-free interest rates	1.69% - 3.04	%	3.94% - 4.06	%	4.57% - 5.22	%
Expected term (in years)	0.5 - 2		0.5 - 2		0.5 - 2	
Expected volatility	100	%	100	%	70	%
Dividend yield	0	%	0	%	0	%
Weighted average fair value per share of stock purchase rights granted during the period	$2.96		$1.42		$0.94	

Pro Forma Information Under SFAS No. 123 for Periods Prior to January 1, 2006

The following table illustrates the effect on net loss and loss per common share as if we had applied the fair value recognition provisions of SFAS No. 123 to stock-based employee compensation for all periods presented. Note that the pro forma disclosures below are provided for the years ended December 31, 2004 and 2005 only because employee stock options were not accounted for using the fair value method during those periods.

(In thousands, except per share data)	December 31, 2004	2005
Net loss as reported	$ (18,523)	$ (14,520)
Add: Stock-based compensation included in reported net loss	498	505
Deduct: Total stock-based employee compensation determined under SFAS 123 for all awards	(6,008)	(7,821)
Pro forma net loss - SFAS No. 123	$ (24,033)	$ (21,836)
Basic and diluted net loss per share:		
As reported	$ (0.73)	$ (0.55)
Pro forma net loss - SFAS 123	$ (0.95)	$ (0.83)

Critical Accounting Estimate

Third Party Royalty Contingency. Under the terms of our amended license agreement with LabCorp, we are contingently liable to reimburse LabCorp for a portion of certain fixed third-party royalty payments (the Royalty Amount) made by LabCorp to other parties in connection with its sales of PreGen-Plus. Our liability to pay the Royalty Amount is based on sales volumes of PreGen-Plus over the exclusive period of the license agreement that terminates on August 13, 2008, and is contingent upon LabCorp requesting such payment. LabCorp has not requested any such payment to date. Based on the sales volumes of Pre-Gen-Plus through December 31, 2006, the potential Royalty Amount was $2.4 million. A significant increase in PreGen-Plus test sales volumes through August 13, 2008, could reduce this obligation, potentially to zero, while test volumes consistent with historical PreGen-Plus sales levels could increase the potential Royalty Amount by an additional $1.8 million, bringing the total potential Royalty Amount to $4.2 million. In addition, if stool-based DNA screening for colorectal cancer is not included in colorectal cancer screening guidelines of the major guidelines organizations, LabCorp may request payment of the Royalty Amount.

We are currently in discussions with LabCorp regarding the terms of the license agreement. Based upon these discussions, we believe that, at this time, it is not probable that LabCorp will request payment of the Royalty Amount and, accordingly, we have not accrued any portion of the Royalty Amount in our financial statements. There can be no assurance that we will be able to successfully negotiate an amendment to our license agreement that would eliminate our contingent liability to pay the amounts described above.

Recent Accounting Pronouncements

In June 2006, the FASB issued FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes an Interpretation of FASB Statement No. 109* (the Interpretation). The Interpretation clarifies the accounting for uncertainty in income taxes recognized in an enterprise s financial statements in accordance with FASB Statement No. 109, *Accounting for Income Taxes*. The Interpretation prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This Interpretation also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The Interpretation is effective for fiscal years beginning after December 15, 2006. We have completed our evaluation of the Interpretation, and do not currently believe that adoption will have a material impact on our consolidated results of operations, financial position or cash flows.

In September 2006, FASB issued Statement No. 157, *Accounting for Fair Value Measurements* (SFAS No. 157). SFAS No. 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements would be separately disclosed by level within the fair value hierarchy. SFAS No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years, with early adoption permitted. We do not expect the adoption of this standard to have a material impact on our consolidated results of operations, financial position or cash flows.

Results of Operations

Comparison of the years ended December 31, 2006 and 2005

Revenue. Total revenue increased to $4.8 million for the year ended December 31, 2006 from $4.3 million for the year ended December 31, 2005. All of our revenues are derived from our license agreement with LabCorp. Revenue is primarily composed of the amortization of up-front technology license fees associated with agreements signed with LabCorp that are being amortized on a straight-line basis over the exclusive license period, which ends in August 2008, and, to a lesser extent, royalties on LabCorp s sales of PreGen-Plus and sales of Effipure units to LabCorp.

The increase in total revenue for the year ended December 31, 2006 as compared to the year ended December 31, 2005 was primarily the result of a one-time, non-cash reduction in revenue of $0.6 million recorded in June 2005 in connection with the amendment of a warrant issued to LabCorp in June 2002 to purchase 1,000,000 shares of our common stock, at an exercise price of $16.09 per share. At the time of issuance, the LabCorp warrant had an expiration date of June 26, 2005. On June 24, 2005, we entered into an amendment to the warrant to extend the expiration date to August 13, 2008, which is the expiration date of the exclusive period under our license agreement with LabCorp. All other terms of the warrant were unaffected. We assigned a value to the warrant extension of $0.6 million using the Black-Scholes option pricing model. In accordance with Emerging Issues Task Force Issue No. 01-09, *Accounting for Consideration Given by a Vendor to a Customer*, we recorded the cost of the warrant extension as a one-time, non-cash reduction in license fee revenue of $0.6 million in the quarter ended June 30, 2005.

During 2006, LabCorp informed the FDA that they were working on changes to PreGen-Plus that could eliminate the use of Effipure. We, therefore, do not expect to record material revenues from the sale of Effipure components to LabCorp during 2007 or beyond. The loss of this revenue beginning in 2007 is not expected to have a material impact on our gross margins because, under our agreement with LabCorp, our Effipure sales to LabCorp resulted in no gross margin as LabCorp reimbursed us only for our costs to provide Effipure to them.

Cost of revenue. Total cost of revenue includes both the cost of Effipure components sold to LabCorp as well as the cost of product royalty revenue owed to third-parties for technology currently incorporated into PreGen-Plus. Total cost of revenue increased to $0.8 million for the year ended December 31, 2006 from $0.6 million for the year ended December 31, 2005. The increase in the cost of product revenue for the year ended December 31, 2006 as compared to the same period of the prior year was primarily the result of higher write-offs of Effipure inventory. We wrote off $0.7 million and $0.4 million in excess Effipure inventory during the years ended December 31, 2006 and 2005, respectively. Specifically, we wrote-off approximately $0.5 million in excess Effipure inventory units during the quarter ended March 31, 2006 as a result of LabCorp s decision to discontinue use of Effipure in the processing of PreGen-Plus tests beyond 2006.

During the development of the manufacturing and supply chain processes for Effipure components, we entered into agreements with certain suppliers and contract manufactures to produce components utilized in Effipure. Certain of these supply agreements included minimum purchase commitments to be fulfilled by us over the life of the agreements, the last of which expired in April 2006. As of December 31,

2006, the carrying value of our Effipure inventory was $0 and we do not anticipate purchasing additional Effipure inventory.

There can be no assurance that LabCorp will be able to identify an alternative process for Effipure in connection with LabCorp s processing of the PreGen-Plus test, which could result in interruption in the PreGen-Plus testing service and could materially harm our business. There can also be no assurance that LabCorp will cease using Effipure in the processing of PreGen-Plus tests in 2007 if LabCorp does not have a suitable alternative to Effipure in place.

Research and development expenses. Research and development expenses decreased to $6.7 million for the year ended December 31, 2006 from $8.0 million for the year ended December 31, 2005. The decrease in the year ended December 31, 2006 as compared to the same period of 2005 was primarily the result of the completion of the primary clinical study supporting Version 2 of our stool-based DNA technology in late 2005, resulting in lower research and development expenses in the year ended December 31, 2006 as compared to the same period of 2005. In addition, as described under the heading Restructuring below, we took actions in October 2006 to reduce our headcount across all departments in order to lower our overall cost structure. This restructuring contributed to the reduction in research and development costs when comparing the year ended December 31, 2006 to December 31, 2005. Included in the decrease in research and development expenses for the year ended December 31, 2006, as compared to the year ended December 31, 2005, were decreases of $0.5 million in personnel-related expenses, $0.5 million in clinical study expenses, $0.4 million related to laboratory space and $0.3 million in laboratory supplies. These decreases were partially offset by an increase of $0.5 million in stock-based compensation expense for the year ended December 31, 2006 as compared to the same period of 2005 as a result of the adoption of SFAS No 123(R) on January 1, 2006. See discussion of the adoption of SFAS No. 123(R) under the section Stock-Based Compensation above.

Sales and marketing expenses. Sales and marketing expenses decreased to $4.4 million for the year ended December 31, 2006 from $5.8 million for the year ended December 31, 2005. This decrease was primarily due to a decrease of $1.5 million in personnel related expenses for the year ended December 31, 2006 as compared to the same period of 2005 as a result of a reduction in the size of our sales and marketing force from seventeen employees at December 31, 2005 to five employees at December 31, 2006. We also reduced our external advertising, marketing and promotional spending by $0.7 million during the year ended December 31, 2006 as compared to the year ended December 31, 2005. These reductions reflect a focus on spending primarily on those initiatives that directly or indirectly support guidelines inclusion, as well as a shift away from direct marketing to physicians to third-party payor groups, self-insured employers and technology assessment groups. These decreases were partially offset by an increase of $0.9 million in stock-based compensation expense for the year ended December 31, 2006 as compared to the same period of 2005 as a result of the adoption of SFAS No 123(R) on January 1, 2006. See discussion of the adoption of SFAS No. 123(R) under the section Stock-Based Compensation above.

General and administrative expenses. General and administrative expenses increased to $6.3 million for the year ended December 31, 2006 from $5.0 million for the year ended December 31, 2005. This increase was primarily the result of an increase of $1.0 million in stock-based compensation expense recorded in the year ended December 31, 2006 as compared to the same period of 2005 as a result of the adoption of SFAS No. 123(R) on January 1, 2006. See discussion of the adoption of SFAS No. 123(R) under the section Stock-Based Compensation above. Also included in the increase in general and administrative expenses for the year ended December 31, 2006 as compared to the year ended December 31, 2005 were increases in professional fees of $0.2 million and personnel related expenses of $0.1 million resulting from the accrual of retention bonuses in the fourth quarter of 2006. See description of retention bonuses under the heading Overview above.

Restructuring

October 2006 Restructuring. On October 17, 2006, we initiated a plan to reduce our cost structure by eliminating 21 positions, or 48% of our staff, across all departments to reduce expenses. This workforce

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reduction reflects our intention to reduce employee related costs, as well as our overall research and development and sales and marketing costs, in order to preserve existing cash and cash equivalents.

Pursuant to the restructuring, we accrued charges of $0.7 million in the quarter ended December 31, 2006 in connection with one-time employee termination benefits, including severance and outplacement services. We are in the process of assessing our current facility needs and could incur additional restructuring charges, in the form of write-offs of leasehold improvements or other fixed assets, in the event facilities are consolidated. Until its facility plans are finalized, we can not currently estimate the amount of those charges, if any.

Amounts remaining in the restructuring accrual at December 31, 2006 are expected to be paid out through September 2007 and are recorded under the caption Accrued expenses in the condensed consolidated balance sheets at December 31, 2006. Amounts included in the table are in thousands.

Type of Liability	Balance, September 30, 2006	Charges	Cash Payments	Non-cash Write-downs	Balance, December 31, 2006
Employee separation costs	$	$ 671	$ (388)	$	$ 283
Total	$	$ 671	$ (388)	$	$ 283

February 2005 Restructuring. In February 2005, we took steps to focus our research and development efforts primarily on improving the sensitivity and other performance aspects of our technology and reduced our cost structure accordingly. We discontinued certain research efforts, reduced our workforce by ten employees, principally in the research and development functions, and amended the lease for our corporate headquarters in Marlborough, MA to reduce the total space leased at the facility from approximately 56,000 square feet to approximately 37,000 square feet.

Pursuant to the restructuring plan, we accrued charges of $0.6 million in the quarter ended March 31, 2005. As of June 30, 2005 all liabilities related to the restructuring had been paid. The table below summarizes the restructuring activities during the year ended December 31, 2005. Amounts included in the table are in thousands.

Type of Liability	Balance, December 31, 2004	Charges	Cash Payments	Non-cash Write-downs	Balance, December 31, 2005
Employee separation costs	$	$ 246	$ (246)	$	$
Facility consolidation costs		380	(98)	(282)	
Total	$	$ 626	$ (344)	$ (282)	$

Employee separation costs in the table above relate to severance packages and out-placement services for employees affected by the restructuring. Our decision to reduce the total space leased and abandon the related leasehold improvements was deemed to be an impairment indicator under SFAS No. 144. As a result of performing the impairment evaluations, asset impairment charges of $0.3 million (included opposite the caption Facility consolidation costs in the table above) were recorded to adjust the carrying value of the related leasehold improvements to their net realizable value. Facility consolidation costs also include one time real estate transaction fees in connection with the lease amendment to reduce the space occupied at our corporate headquarters.

Interest income. Interest income increased to $1.3 million for the year ended December 31, 2006 from $1.1 million for the year ended December 31, 2005. This increase was due to an increase in interest rates on investments held during the year ended December 31, 2006 as compared to the same period of 2005, partially offset by lower average cash, cash equivalents and marketable securities balances held during the year ended December 31, 2006 as compared to the year ended December 31, 2005.

Comparison of the years ended December 31, 2005 and 2004

Revenue. Total revenue decreased to $4.3 million for the year ended December 31, 2005 from $4.9 million for the year ended December 31, 2004. Revenue is primarily composed of amortization of up-front technology license fees associated with agreements signed with LabCorp that are being amortized on a straight-line basis over the exclusive license period and, to a lesser extent, royalties on LabCorp s sales of PreGen-Plus (LabCorp s colon cancer screening testing service), and sales of Effipure units to LabCorp. The decrease in revenue for the year ended December 31, 2005 as compared to the year ended December 31, 2004 was primarily the result of a one-time, non-cash reduction in revenue of $0.6 million recorded in June 2005 in connection with the amendment of a warrant originally issued to LabCorp in June 2002 to purchase 1,000,000 shares of our common stock, at an exercise price of $16.09 per share. At the time of issuance, the warrant had an expiration date of June 26, 2005. On June 24, 2005, we entered into an amendment to the warrant to extend the expiration date to August 13, 2008, which is the expiration date of the exclusive period under our license agreement with LabCorp. All other terms of the warrant were unaffected. We assigned a value to the warrant extension of $0.6 million using the Black-Scholes option pricing model. In accordance with Emerging Issues Task Force Issue No. 01-09, *Accounting for Consideration Given by a Vendor to a Customer*, we recorded the cost of the warrant extension as a one-time, non-cash reduction in license fee revenue of $0.6 million in the quarter ended June 30, 2005.

Cost of revenue. Total cost of revenue increased to $0.6 million for the year ended December 31, 2005 from $0.5 million for the year ended December 31, 2004. The cost of product revenue includes the costs of Effipure components while the cost of product royalty revenue represents royalties owed to third-parties for technology currently incorporated into PreGen-Plus. The increase in the cost of product revenue for the year ended December 31, 2005 as compared to the year ended December 31, 2004 was the result of an increase in charges resulting from the write-off of excess and expired Effipure inventory units, partially offset by a decrease in the number of Effipure components shipped to LabCorp during the year ended December 31, 2005 versus the year ended December 31, 2004. We recorded charges of approximately $0.4 million and $0.2 million during the years ended December 31, 2005 and 2004, respectively, to write-off excess and expired Effipure inventory units.

As of December 31, 2005, the carrying value of our Effipure inventory was $0.4 million and was recorded under the caption Prepaid expenses and other current assets in our consolidated balance sheets.

Research and development expenses. Research and development expenses, excluding departmental allocations of stock-based compensation, decreased to $7.8 million for the year ended December 31, 2005 from $10.9 million for the year ended December 31, 2004. This decrease was primarily the result of actions taken in February 2005 to focus research and development efforts on improving the sensitivity and other performance aspects of our technologies and associated cost reductions. As described under the heading Restructuring below, we discontinued certain research efforts and reduced our workforce by ten employees, principally in the research and development functions. Included in the decrease in research and development expenses for the year ended December 31, 2005 as compared to the year ended December 31, 2004 were decreases of $1.5 million in personnel-related expenses, $0.8 million in laboratory expenses, $0.4 million related to laboratory space and $0.4 million in clinical study expenses.

Sales and marketing expenses. Sales and marketing expenses, excluding departmental allocations of stock-based compensation, decreased to $5.6 million for the year ended December 31, 2005 from $5.7 million for the year ended December 31, 2004. This decrease was primarily due to a decrease of $0.9 million in external marketing and promotional expenses partially offset by an increase of $0.8 million in sales personnel and related costs as a result of the expansion of our sales force to conduct certain sales initiatives and to complement the direct sales efforts of LabCorp. In 2005, we decided to focus the entirety of our sales and marketing efforts primarily on the following constituents: thought leaders and third party payors, including self-insured employers, managed care organizations, and the technology assessment groups within these organizations. We began 2005 with twenty-four sales and

marketing employees and ended 2005 with seventeen employees in sales and marketing functions.

General and administrative expenses. General and administrative expenses, excluding departmental allocations of stock-based compensation, decreased to $4.7 million for the year ended December 31, 2005 from $6.5 million for the year ended December 31, 2004. The decrease was primarily due to a decrease in professional fees of $1.0 million resulting from lower legal, consulting and audit fees as well as a decrease of $0.7 million in severance costs recorded in the year ended December 31, 2004 in connection with the departure of certain executives. There was also a decrease in personnel related expenses of $0.1 million in the year ended December 31, 2005 as compared to 2004.

Restructuring. In February 2005, we took steps to focus our research and development efforts primarily on improving the sensitivity and other performance aspects of our technology and reduced our cost structure accordingly. We discontinued certain research efforts, reduced our workforce by ten employees, principally in the research and development functions, and amended the lease for our corporate headquarters in Marlborough, MA to reduce the total space leased at the facility from approximately 56,000 square feet to approximately 37,000 square feet.

Pursuant to the restructuring plan, we accrued charges of $0.6 million in the quarter ended March 31, 2005. As of June 30, 2005 all liabilities related to the restructuring had been paid. The table below summarizes the restructuring activities during the year ended December 31, 2005. Amounts included in the table are in thousands.

Type of Liability	Balance, December 31, 2004	Charges	Cash Payments	Non-cash Write-downs	Balance, December 31, 2005
Employee separation costs	$	$ 246	$ (246)	$	$
Facility consolidation costs		380	(98)	(282)	
Total	$	$ 626	$ (344)	$ (282)	$

Employee separation costs in the table above relate to severance packages and out-placement services for employees affected by the restructuring. Our decision to reduce the total space leased and abandon the related leasehold improvements was deemed to be an impairment indicator under SFAS No. 144. As a result of performing the impairment evaluations, asset impairment charges of $0.3 million (included opposite the caption Facility consolidation costs in the table above) were recorded to adjust the carrying value of the related leasehold improvements to their net realizable value. Facility consolidation costs also include one time real estate transaction fees in connection with the lease amendment to reduce the space occupied at our corporate headquarters.

Our employee headcount decreased from 71 employees at December 31, 2004 to 49 employees at December 31, 2005. In addition to the workforce reduction in connection with our restructuring discussed above, we reduced our headcount on an involuntary basis by an additional three employees during the remainder of 2005. Our headcount was further reduced during 2005 by nine employees as a result of normal attrition.

Stock-based compensation. Stock-based compensation, which is a non-cash expense, was $0.5 million for the years ended December 31, 2004 and 2005. Stock-based compensation for the year ended December 31, 2005 included $0.2 million related to common stock awards and stock options granted to non-employees, which are recorded at fair value based on the fair value measurement criteria of SFAS No. 123, $0.2 million recorded in connection with our 2005 401(k) plan employer match, which was made in common stock (see note 12 to our consolidated financial statements included in this Form 10-K) and $0.1 million related to the amortization of the difference between the exercise price and fair value of common stock on the date of grant for certain options granted prior to our initial public offering.

Stock-based compensation for the year ended December 31, 2004 included $0.4 million related to the amortization of the difference between the exercise price and fair value of common stock on the date of grant for certain options granted prior to our initial public offering and $0.1 million related to common stock awards and stock options granted to non-employees.

Interest income. Interest income increased to $1.1 million for the year ended December 31, 2005 from $0.7 million for the year ended December 31, 2004. This increase was due to an increase in interest rates on investments held during the year ended December 31, 2005 as compared to the year ended December 31, 2004, partially offset by lower average cash, cash equivalents and marketable securities balances held during the year ended December 31, 2005 as compared to the year ended December 31, 2004.

Liquidity and Capital Resources

We have financed our operations since inception primarily through private sales of preferred stock, public offerings of common stock in February 2001 and February 2004 and cash received from LabCorp in connection with our strategic alliance. As of December 31, 2006, we had approximately $21.1 million in cash, cash equivalents and marketable securities and $0.8 million in restricted cash, which has been pledged as collateral for an outstanding letter of credit in connection with the lease for our Marlborough, MA facility.

All of our investments in marketable securities are comprised of fixed income investments and all are deemed available-for-sale. The objectives of this portfolio are to provide liquidity and safety of principal while striving to achieve the highest rate of return, consistent with these two objectives. Our investment policy limits investments to certain types of instruments issued by institutions with investment grade credit ratings and places restrictions on maturities and concentration by type and issuer.

Net cash used in operating activities was $12.2 million, $16.0 million and $20.9 million for the years ended December 31, 2006, 2005 and 2004, respectively. The principal use of cash in operating activities for each of the years ended December 31, 2006, 2005 and 2004 was to fund our net loss. The decrease in net cash used in operating activities for the year ended December 31, 2006 as compared to the year ended December 31, 2005 was primarily due to decreases in sales and marketing and applied research spending as a result of cost reduction actions taken during 2006 which are discussed elsewhere in this report. The decrease in net cash used in operating activities for the year ended December 31, 2005 as compared the year ended December 31, 2004 was primarily due to decreases in applied research and administrative expenses as a result of restructuring our operations during 2005, as described elsewhere in this report. Cash flows from operations can vary significantly due to various factors, including changes in our operations, prepaid expenses, accounts payable and accrued expenses.

Net cash provided by investing activities was $4.5 million for the year ended December 31, 2006, as compared to net provided by investing activities of $15.8 million in 2005 and net cash used in investing activities of $24.1 million in 2004. Excluding the impact of purchases and maturities of marketable securities, net cash used in investing activities was $0.4 million in each of the years ended December 31, 2006, 2005 and 2004.

Purchases of property and equipment of $0.2 million during the year ended December 31, 2006 were materially consistent with purchases of property and equipment of $0.2 and $0.3 million during the years ended December 31, 2005 and 2004, respectively. We expect that purchases of property and equipment during 2007 will be substantially consistent with the amounts invested during 2006. We continued to invest in our patent portfolio for the year ended December 31, 2006 and we expect that investments made in our patent portfolio during 2007 will be substantially consistent with the $0.2 million invested during 2006.

Net cash provided by financing activities was $0.5 million and $0.1 million for the years ended December 31, 2006 and 2005, respectively, and included $0.3 million and $0.1 million, respectively, in proceeds from the issuance of common stock under our employee stock option and purchase plans. Also included in net cash provided by financing activities for the year ended December 31, 2006 was an decrease in restricted cash of approximately $0.2 million as a result of a reduction in the amount of collateral required in connection with the lease for our offices in Marlborough, MA. Net cash provided by financing activities for the year ended December 31, 2004 was $43.9 million and was primarily due to the offering of 6.9 million shares of our common stock in February 2004, which generated net proceeds to us of

approximately $43.3 million, as well as $0.4 million in repayment of notes receivable and $0.2 million in proceeds from issuances of common stock under our stock option and employee stock purchase plans.

Assuming no material cash outlays relating to a shift in our strategic direction or entry into new markets, we expect that cash, cash equivalents and short-term investments on hand at December 31, 2006 will be sufficient to fund our current operations for at least the next twelve months, based upon our current operational plan following the restructuring actions taken in October 2006. We do not expect that product royalty payments from LabCorp will materially supplement our liquidity position in the next twelve months given that, among other things, a determination has not yet been made regarding the inclusion of stool-based DNA screening in colorectal cancer screening guidelines, the Centers for Medicare and Medicaid Services (CMS) have not approved stool-based DNA colorectal cancer screening for payment and no payors have issued formal broad policy approving payment for stool-based DNA screening. Although milestone and other performance-based payments from LabCorp for which we may be eligible under our strategic agreement may supplement our liquidity position, the timing and receipt of milestone and performance-based payments is unpredictable at this time. Of the remaining $45 million of payments for which we may be eligible under our amended agreement with LabCorp, $15 million relates to milestone payments associated with the inclusion of stool-based DNA testing for colorectal cancer into certain clinical guidelines and policy-level reimbursement approvals that, in large part, depend upon decisions to be made by third parties. The remaining $30 million relates to the achievement of certain significant cumulative LabCorp revenue thresholds that depend upon LabCorp s widespread success with respect to its sales of PreGen-Plus. Because these milestones are not expected in the foreseeable future, if at all, no assurance can be given that any payments pursuant to our agreement with LabCorp will be sufficient or timely enough to meet our liquidity needs. In addition, we continue to selectively explore potential acquisitions or licensing of technologies to broaden our technology portfolio. If revenue and other payments from LabCorp are insufficient to meet our liquidity needs, if we change our strategic direction or pursue an acquisition of new technologies, or if we determine that our sales, marketing or research and development expenses must increase to achieve our goals, we will be required to raise additional capital or further reduce the scale of our operations, or both.

The table below reflects our estimated fixed obligations and commitments as of December 31, 2006:

		Payments Due by Period			
Description	**Total (in Thousands)**	**Less Than One Year**	**1 - 3 Years**	**3 - 5 Years**	**More Than 5 Years**
Obligations under license and collaborative agreements	$ 5,388	$ 668	$ 630	$ 630	$ 3,460
Operating lease obligations	3,566	960	2,004	602	
Retention bonus obligations in connection with employment agreements	1,296	200	1,096		
Purchase obligations	164	164			
Total	$ 10,414	$ 1,992	$ 3,730	$ 1,232	$ 3,460

Obligations under license and collaboration agreements represent on-going commitments under various research collaborations and licensing agreements. Commitments under license agreements generally expire concurrent with the expiration of the intellectual property licensed from the third party. Operating leases reflect remaining obligations associated with leased facilities in Marlborough, Massachusetts. Retention bonus obligations represent commitments to our remaining employees following our October 2006 restructuring, as well as obligations under our employment agreement with Don Hardison, our President and Chief Executive Officer. Purchase obligations primarily represent commitments associated with our research and development activities. We do not have any special purpose entities or any other off balance sheet financing arrangements.

Our future capital requirements include, but are not limited to, continued funding of our research and development efforts, product development and potential FDA submissions, potential clinical studies required for such FDA submissions, potential in-licensing of new technology for commercial development, sales and marketing efforts associated with the commercialization of stool-based DNA screening technologies, purchases of laboratory equipment and continued investment in our intellectual property estate. Our future capital requirements may depend on many factors, including the following:

- the inclusion of stool-based DNA screening in colorectal cancer screening guidelines of major guidelines organizations (including the ACS/MSTF-CRC) and the timing thereof;

- the regulatory requirements for PreGen-Plus, or other stool-based DNA testing services utilizing our technologies, and the timing of any required regulatory approval process;

- acceptance, endorsement and formal policy approval of stool-based DNA screening for reimbursement by Medicare and other third-party payors;

- our ability to achieve milestones under our strategic agreement with LabCorp;

- a determination that additional studies surrounding our technologies are needed;

- a sustained level of interest and commitment by LabCorp in the commercialization of PreGen-Plus;

- stool-based DNA screening becoming a standard of care among prescribing physicians;

- the scope of and progress made in our research and development activities;

- the successful commercialization and sales growth of PreGen-Plus, or other stool-based DNA testing services utilizing our technologies; and

- a shift in our strategic direction or entry into new markets.

Until such time as some or all of the factors outlined above are in place, we do not expect material revenue growth. Moreover, if stool-based DNA screening is not included in colorectal cancer screening guidelines of one or more major organizations issuing guidelines recommendations, or if inclusion or notification of inclusion in such screening guidelines is significantly delayed, our business, financial condition and results of operations would be materially adversely affected and our business direction may change. In such event, we would likely be required to further significantly curtail our operations.

We cannot assure you that our business will ever generate sufficient cash flow from operations, or that we will be able to liquidate our investments or obtain financing when needed or desirable. While we may, from time to time, seek to access the capital markets, there can be no assurance that we will be successful in any future capital raising efforts, or that we would be able to raise additional funds at an acceptable price level. An inability to fund our operations would have a material adverse effect on our business, financial condition and results of operations.

Net Operating Loss Carryforwards

As of December 31, 2006, we had net operating loss carryforwards of approximately $126.7 million and tax credit carryforwards of approximately $3.2 million. The net operating loss and tax credit carryforwards will expire at various dates through 2026, if not utilized. The Internal Revenue Code and applicable state laws impose substantial restrictions on a corporation s utilization of net operating loss and tax credit carryforwards if an ownership change is deemed to have occurred.

A valuation allowance is provided for deferred tax assets if it is more likely than not these items will either expire before we are able to realize their benefit, or that future deductibility is uncertain. In general, companies that have a history of operating losses are faced with a difficult burden of proof on their ability to generate sufficient future income within the next two years in order to realize the benefit of the deferred tax assets. We have recorded a valuation against our deferred tax assets based on our history of losses. The deferred tax assets are still available for us to use in the future to offset taxable income, which would result in the recognition of tax benefit and a reduction to our effective tax rate.

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Off-Balance Sheet Arrangements

As of December 31, 2006, we had no off-balance sheet arrangements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

The Company s exposure to market risk is principally confined to its cash, cash equivalents and marketable securities. We invest our cash, cash equivalents and marketable securities in securities of the U.S. governments and its agencies and in investment-grade, highly liquid investments consisting of commercial paper, bank certificates of deposit and corporate bonds, all of which are currently invested in the U.S and are classified as available-for-sale. We place our cash equivalents and marketable securities with high-quality financial institutions, limit the amount of credit exposure to any one institution and have established investment guidelines relative to diversification and maturities designed to maintain safety and liquidity.

Based on a hypothetical ten percent adverse movement in interest rates, the potential losses in future earnings, fair value of risk-sensitive financial instruments, and cash flows are immaterial, although the actual effects may differ materially from the hypothetical analysis.

Item 8. Financial Statements and Supplementary Data

EXACT SCIENCES CORPORATION
Index to Financial Statements

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of EXACT Sciences Corporation:

We have audited the accompanying consolidated balance sheets of EXACT Sciences Corporation as of December 31, 2005 and 2006, and the related consolidated statements of operations, stockholders equity, and cash flows for each of the three years in the period ended December 31, 2006. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of EXACT Sciences Corporation at December 31, 2005 and 2006, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Notes 2 and 8 to the consolidated financial statements, on January 1, 2006, the Company adopted the provisions of Statement of Financial Accounting Standards No. 123(R), *Share-Based Payment*.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of EXACT Sciences Corporation s internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 13, 2007 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Boston, Massachusetts
March 13, 2007

EXACT SCIENCES CORPORATION

Consolidated Balance Sheets

(Amounts in thousands, except share data)

	December 31, 2005	December 31, 2006
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 11,987	$ 4,831
Marketable securities	21,112	16,244
Prepaid expenses and other current assets	1,158	386
Total current assets	34,257	21,461
Property and Equipment, at cost:		
Laboratory equipment	4,123	3,832
Office and computer equipment	1,407	1,413
Leasehold improvements	1,259	1,259
Furniture and fixtures	299	299
	7,088	6,803
Less Accumulated depreciation and amortization	(5,939)	(5,959)
	1,149	844
Patent costs, net of accumulated amortization of $2,279 and $2,871 at December 31, 2005 and 2006, respectively	1,419	763
Restricted cash	1,020	800
	$ 37,845	$ 23,868
LIABILITIES AND STOCKHOLDERS EQUITY		
Current Liabilities:		
Accounts payable	$ 468	$ 158
Accrued expenses	1,485	1,844
Deferred license fees, current portion	4,363	4,363
Total current liabilities	6,316	6,365
Deferred license fees, less current portion	6,908	2,545
Commitments and contingencies		
Stockholders Equity:		
Common stock, $0.01 par value		
Authorized 100,000,000 shares		
Issued and outstanding 26,436,498 and 26,863,363 shares at December 31, 2005 and 2006, respectively	264	269
Additional paid-in capital	162,349	165,545
Treasury stock, 85,550 shares	(97)	(97)
Other comprehensive (loss) income	(45)	6
Accumulated deficit	(137,850)	(150,765)
Total stockholders equity	24,621	14,958
	$ 37,845	$ 23,868

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

EXACT SCIENCES CORPORATION

Consolidated Statements of Operations

(Amounts in thousands, except per share data)

	Year Ended December 31,		
	2004	**2005**	**2006**
Revenue:			
Product royalty fees	$ 166	$ 206	$ 179
License fees	4,514	3,828	4,363
Product	255	216	208
	4,935	4,250	4,750
Cost of revenue:			
Product royalty fees	11	13	12
Product	476	553	797
	487	566	809
Gross profit	4,448	3,684	3,941
Operating expenses:			
Research and development (1)	11,122	7,956	6,735
Sales and marketing (1)	5,697	5,777	4,433
General and administrative (1)	6,824	4,959	6,269
Restructuring		626	671
	23,643	19,318	18,108
Loss from operations	(19,195)	(15,634)	(14,167)
Interest income	672	1,114	1,252
Net loss	$ (18,523)	$ (14,520)	$ (12,915)
Net loss per share basic and diluted	$ (0.73)	$ (0.55)	$ (0.49)
Weighted average common shares outstanding basic and diluted	25,334	26,270	26,509

(1) Non-cash stock-based compensation expense included in these amounts are as follows:

Research and development	$ 221	$ 113	$ 653
Sales and marketing		159	1,089
General and administrative	277	233	1,264

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

EXACT SCIENCES CORPORATION

Consolidated Statements of Stockholders Equity

(Amounts in thousands, except per share data)

	Common Stock Number of Shares	$0.01 Par Value	Additional Paid In Capital	Treasury Stock Number of Shares	Value	Notes Receivable	Deferred Compensation	Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders Equity	Other Comprehensive Income
Balance, January 1, 2004	19,306,936	$ 193	118,225	60,959	$ (12)	$ (641)	$ (729)	$ (1)	$ (104,807)	$ 12,228	
Sale of common stock, net of issuance costs of $3,270,014	6,900,000	69	43,236							43,305	$
Issuance of shares under stock purchase plan	45,524		250							250	
Exercise of common stock options	32,607	1	15							16	
Repayment of notes receivable						370				370	
Repurchase of restricted stock through forgiveness of notes receivable				24,591	(85)	266				181	
Compensation expense related to issuance (forfeitures) of stock options			(370)				640			270	
Net loss									(18,523)	(18,523)	(18,523)
Other comprehensive loss								(114)		(114)	(114)
Comprehensive loss											$ (18,637)
Balance, December 31, 2004	26,285,067	$ 263	161,356	85,550	$ (97)	$ (5)	$ (89)	$ (115)	$ (123,330)	$ 37,983	
Issuance of shares under stock purchase plan	44,923		112							112	$
Exercise of common stock options	35,190		25							25	
Forgiveness of subscription receivable						5				5	
Compensation expense related to issuance of stock options and restricted stock awards	71,318	1	226				89			316	
Extension of warrant expiration date (Note 3)			630							630	
Net loss									(14,520)	(14,520)	(14,520)
Other comprehensive income								70		70	70
Comprehensive loss											