ORASURE TECHNOLOGIES INC Form 10-K March 14, 2012 Table of Contents

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# **FORM 10-K**

# ANNUAL REPORT PURSUANT

TO SECTION 13 OR 15(d) OF THE

# **SECURITIES EXCHANGE ACT OF 1934**

(Mark One)

X ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2011

OR

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

Commission File No. 001-16537

# ORASURE TECHNOLOGIES, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of 36-4370966 (I.R.S. Employer Identification No.)

**Incorporation or Organization)** 

220 East First Street

Bethlehem, Pennsylvania (Address of Principal Executive Offices)

18015 (Zip Code)

(610) 882-1820

(Registrant s Telephone Number, Including Area Code)

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

Title of Each Class Common Stock \$0.000001 par value per share

Particles Name of Each Exchange on Which Registered par value per share 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." 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 Exchange Act. Yes." No x

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

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). Yes x No."

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 check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer "

Accelerated filer x

Non-accelerated filer "

Smaller reporting company"

(Do not check if a smaller reporting company)

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

State the aggregate market value of the voting and non-voting common equity held by nonaffiliates, computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the Registrant s most recently completed second fiscal quarter (June 30, 2011): \$391,263,048

Indicate the number of shares outstanding of each of the Registrant s classes of common stock, as of March 7, 2012: 48,175,889 shares.

# **Documents Incorporated by Reference:**

Portions of the Registrant s Definitive Proxy Statement for the 2012 Annual Meeting of Stockholders are incorporated by reference into Part III of this Annual Report.

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This Report contains certain forward-looking statements, within the meaning of the Federal securities laws. These may include statements about our expected revenues, earnings, expenses or other financial performance, future product performance or development, expected regulatory filings and approvals, planned business transactions, expected manufacturing performance, views of future industry, competitive or market conditions, and other factors that could affect our future operations, results of operations or financial position. These statements often include words, such as believes, expects, anticipates, intends, plans, estimates, may, will, should, could, or similar expressions.

Forward-looking statements are not guarantees of future performance or results. Known and unknown factors could cause actual performance or results to be materially different from those expressed or implied in these statements. Factors that could affect our results are discussed more fully under Item 1A., entitled Risk Factors, and elsewhere in this Annual Report. Although forward-looking statements help to provide complete information about us, readers should keep in mind that forward-looking statements may not be reliable. Readers are cautioned not to place undue reliance on the forward-looking statements. The forward-looking statements are made as of the date of this Annual Report and we undertake no duty to update these statements.

References in this Annual Report to OraSure mean OraSure Technologies, Inc. References in this Annual Report to we, us, our, or the Company mean OraSure and its consolidated subsidiaries, unless otherwise indicated.

## PART I

# ITEM 1. Business.

Our business principally involves the development, manufacture, marketing and sale of oral fluid diagnostic products and specimen collection devices using our proprietary oral fluid technologies, as well as other diagnostic products including immunoassays and other *in vitro* diagnostic tests that are used on other specimen types. We also manufacture and sell medical devices used for the removal of benign skin lesions by cryosurgery or freezing. Our diagnostic products include tests that are performed on a rapid basis at the point of care and tests that are processed in a laboratory. These products are sold in the United States and internationally to various clinical laboratories, hospitals, clinics, community-based organizations and other public health organizations, distributors, government agencies, physicians offices, and commercial and industrial entities. One of our products has been sold in the over-the-counter (OTC) or consumer retail markets in North America, Europe, Central and South America, and Australia.

*In vitro* diagnostic testing is the process of analyzing oral fluid, blood, urine and other bodily fluids or tissue for the presence of specific substances or markers. We have targeted the use of oral fluid in our products as a differentiating factor and believe that it provides a significant competitive advantage over blood and urine. Our oral fluid tests have sensitivity and specificity comparable to blood and/or urine tests. When combined with their ease of use, non-invasive nature, and cost effectiveness, our oral fluid tests represent a very competitive alternative to the more traditional testing methods in the diagnostic space.

In August 2011, we completed the acquisition of DNA Genotek Inc. ( DNAG ), a company based in Ottawa, Canada. DNAG manufactures and sells oral fluid collection kits that are used to collect samples of genetic material (DNA and RNA) for molecular testing in the academic research, clinical, pharmacogenomics, personalized medicine, animal and livestock genetics markets. DNAG s lead product, the Oragene sample collection kit, provides an all-in-one system for the collection, stabilization, transportation and storage of DNA from saliva. DNAG serves customers in many countries worldwide, including many leading research universities and hospitals in the world.

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OraSure was formed in May 2000 under Delaware law solely for the purposes of combining two companies, STC Technologies, Inc. (STC Technologies) and Epitope, Inc. (Epitope), and changing the state of incorporation of Epitope from Oregon to Delaware. STC Technologies and Epitope were merged into OraSure on September 29, 2000. Our principal offices are located at 220 East First Street, Bethlehem, Pennsylvania 18015, and our telephone number is (610) 882-1820.

Additional information about us can be found on our website. Our website address is <a href="www.orasure.com">www.orasure.com</a>. We make available free of charge through a link provided at such website our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K and our other filings with the Securities and Exchange Commission (SEC), as well as any amendments to those Reports and filings. These Reports and filings are made available as soon as reasonably practicable after they are filed or furnished to the SEC. Our Internet website and the information contained in or connected to that website are not intended to be incorporated by reference into this Annual Report.

#### **Products**

The following is a summary of our principal products and their regulatory and commercial status:

Product	Description	Regulatory Status	Commercial Status
OraQuick	A rapid, point-of-care	Premarket approval ( PMA ) by the U.S. Food and Drug	Marketed
ADVANCE® HIV-1/2	qualitative test for antibodies to the Human Immunodeficiency	Administration (FDA) for use with oral fluid, finger-stick and	
	Virus Type 1 (HIV-1) and Type 2 (HIV-2 and together with HIV-1, HIV-1/2) that can be visually read in approximately 20 minutes.		Marketed
		CE mark (European Union) approved for use with oral fluid, finger-stick and venous whole blood, serum and plasma. Also registered in various other countries.	Marketed
OraQuick® HIV-1/2 OTC	A rapid, point-of-care qualitative oral fluid HIV-1/2 test intended to be sold in various OTC markets.	PMA application for OTC use is pending with FDA.	Not Marketed
OraQuick <sup>®</sup> HCV	A rapid, point-of-care qualitative test for antibodies to the hepatitis C virus ( HCV ) that can be visually read in approximately 20 minutes.	PMA approved and CLIA waived for use with venous whole blood and finger-stick whole blood specimens.	Marketed
		Clinical program for oral fluid claim remains pending.	Not Marketed

Marketed

CE mark (European Union) approved for use with oral fluid, finger-stick and venous whole blood, serum and plasma. Also registered in various other countries.

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Product OraSure QuickFlu Rapid Flu A&B Test	Description A rapid, point-of-care qualitative test for antibodies to influenza (flu) Types A and B, including H1N1 infections, with results available in 10 minutes.	Regulatory Status FDA 510(k) cleared for use with nasal swab, nasopharyngeal swab and nasal aspirate/wash.	Commercial Status Marketed
OraSure®	Oral fluid collection device for the detection of antibodies to HIV-1 and for detection of	PMA approved by FDA for use in detecting antibodies to HIV-1.	Marketed
	cocaine and cotinine in an oral fluid sample in a laboratory setting.	FDA 510(k) cleared for use in detecting cocaine and cotinine (an indicator of nicotine) in oral fluid.	Marketed
		CE marked and registered in various countries.	Marketed
Intercept®	Oral fluid collection device for oral fluid drugs of abuse ( DOA ) testing in a laboratory setting.	FDA 510(k) cleared for use with MICRO-PLATE DOA assays.	Marketed
		CE marked and registered in certain countries.	Marketed
MICRO-PLATE DOA Assays	Used to detect the following drugs in an oral fluid sample collected with Intercept® device: tetrahydrocannabinol ( THC or	Nine drug assays FDA 510(k) cleared.	Marketed
	marijuana), cocaine, opiates, amphetamines, methamphetamines, phencyclidine ( PCP ), benzodiazepines, barbiturates and methadone.	Assays CE marked and registered in certain countries.	Marketed
Homogeneous DOA Assays	Homogeneous fully-automated oral fluid DOA assays jointly developed with Roche Diagnostics for use on oral fluid samples collected with Intercept® device.	FDA 510(k) cleared for use of PCP, opiates, cocaine, methamphetamines and amphetamines assays with Intercept® collection device. Clinical studies for marijuana and barbiturates underway.	Marketed
Cryosurgical Systems Professional	Cryosurgical (freezing) system for the removal of warts and other benign skin lesions, marketed under the	Nine indications FDA 510(k) cleared.	Marketed
	Histofreezer® tradename primarily to the physicians office market.	CE marked and registered in certain countries.	Marketed
Cryosurgical Systems OTC	Cryosurgical system for the removal of common and plantar	FDA 510(k) cleared for common and plantar warts.	Marketed

warts, sold in various OTC markets.

Registered in Canada for warts and skin tags.

Marketed

Marketed

CE marked and registered for warts in certain countries under Scholl Freeze Spray® and POINTTS® names.

Not Marketed

CE marked for skin tags.

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<b>Product</b> Oragene <sup>®</sup> ·DX	Description  Non-invasive all-in-one system for the collection, stabilization, transportation and storage of human DNA from saliva.	Regulatory Status FDA 510(k) cleared for in vitro diagnostic use with FDA-cleared molecular tests.	Commercial Status Marketed
Oragene <sup>®</sup> ·DNA	Non-invasive all-in-one system for the collection, stabilization, transportation, and storage of human DNA from saliva.	CE mark and registered as Class 1 Medical Device in Canada.	Marketed
		Registered in various other countries.	
Oragene <sup>®</sup> ·DISCOVER	Non-invasive all-in-one system for the collection, stabilization, transportation, and storage of human DNA from saliva.	Research use only product.	Marketed
Oragene®·RNA	Non-invasive all-in-one system for the collection, stabilization and transportation of RNA from human saliva.	Research use only product.	Marketed
ORAcollect	All-in-one system for the collection, stabilization, transportation, and storage of human DNA from saliva.	CE marked and registered as Class 1 Medical Device in the U.S. and Canada.	Marketed
		Registered in various other countries.	
OMNIgene ·DISCOVER	Non-invasive all-in-one system for the collection, stabilization, transportation, and storage of microbial DNA from saliva.	Research use only product.	Marketed
Performagene ·	All-in-one systems for the collection, stabilization,	Animal research use only	Marketed
LIVESTOCK and	transportation, and storage of livestock DNA from nasal		
Oragene®-ANIMAL	samples.		

In addition to the above products, we also sell certain immunoassay tests and reagents for insurance risk assessment, substance abuse testing and forensic toxicology applications; an oral fluid Western blot HIV-1 confirmatory test for confirming positive HIV-1 test results obtained from the use of our OraSure® collection device; and the FDA 510(k) cleared Q.E.D.® rapid point-of-care saliva alcohol test.

# OraQuick® Rapid HIV Test

OraQuick® is our rapid point-of-care test platform designed to test oral fluid, whole blood (i.e., both finger-stick and venous), plasma and serum samples for the presence of various antibodies or analytes. The device uses a porous flat pad to collect an oral fluid specimen. After collection, the pad is inserted into a vial containing a pre-measured amount of developer solution and allowed to develop. When blood, plasma or serum is to be tested, a loop collection device is used to collect a drop of the specimen and mix it in the developer solution, after which the collection pad is inserted into the solution and allowed to develop. In all cases, the specimen and developer solution then flow through the testing device where test results are observable in approximately 20 minutes. The OraQuick® device is a screening test and generally requires a confirmation test where an initial positive result is obtained.

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This product is sold under the OraQuick *ADVANCE*® name in North America, Europe and certain other countries and under the OraQuick® name in other developing countries. The test has received PMA approval from the FDA for the detection of antibodies to both HIV-1 and HIV-2 in oral fluid, finger-stick whole blood, venous whole blood and plasma. This test is available for use by laboratories located in the United States certified under the Clinical Laboratory Improvements Amendment of 1988, or CLIA, to perform moderately complex tests. We have also received a CLIA waiver for use of the test with oral fluid and finger-stick and venous whole blood. As a result, the test can be used by numerous additional sites in the United States not certified under CLIA to perform moderately complex tests, such as outreach clinics, community-based organizations and physicians offices.

On the international front, we have obtained a CE mark for our OraQuick *ADVANCE*® test so that we can sell this product in Europe and other countries accepting the CE mark for commercialization and this product is registered in other countries. We have distributors in place for several countries and are seeking to increase awareness and expand our distribution network for this product throughout the world.

We believe that the OraQuick *ADVANCE*® device, because it is approved for detecting antibodies to both HIV-1 and HIV-2 in finger-stick and venous whole blood, oral fluid and plasma samples, provides a significant competitive advantage in the market for rapid HIV testing in the United States and elsewhere.

OraQuick® HCV Rapid Antibody Test

Another test available on the OraQuick® platform is the OraQuick® HCV rapid antibody test. Like the OraQuick® HIV test, this product is a qualitative test that can detect antibodies to the Hepatitis C virus, or HCV, in a variety of sample types. The OraQuick® HCV test operates in substantially the same manner as the OraQuick® HIV test.

We have received FDA approval for use of the test in detecting HCV antibodies in venous whole blood and finger-stick whole blood specimens, making it the first rapid HCV test approved by the FDA for use in the United States. In November 2011, we also received a CLIA waiver for use of this product in the same specimen types. Our clinical program for approval of an oral fluid claim for this product is on hold pending further discussions with the FDA. The OraQuick® HCV test has received a CE mark for use with oral fluid, venous whole blood, finger-stick whole blood, plasma and serum and is sold in Europe and other foreign countries.

OraSure QuickFlu Rapid Flu A&B Test

The OraSure QuickFlu rapid flu A&B test is an FDA 510(k) cleared rapid qualitative test for the detection of influenza (flu) Types A and B, including H1N1 viral infections. The test utilizes specimen collected with a nasal swab, nasopharyngeal swab or nasal aspirate/wash. A reagent is first inserted into a test cartridge, the specimen is added and the test is allowed to flow. Results are available in as little as ten minutes.

The OraSure QuickFlu test is intended to be used as an aid in the rapid differential diagnosis of influenza and covers a broad range of influenza subtypes, including 2009 H1N1, with proven clinical detection spanning three flu seasons from 2007 through 2009. The test is highly accurate across all specimen types based on standard culture confirmation with demonstrated sensitivity for influenza Type A at 90% or greater. Additionally, in clinical studies a significant number of culture negative samples that were tested positive with the OraSure QuickFlu product were determined to be true positives by PCR (polymerase chain reaction) testing.

This product is manufactured for us under an agreement with Princeton BioMeditech Corporation. The OraSure QuickFlu test is currently available for sale in certain U.S. markets.

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OraSure® Collection Device

Our OraSure® oral fluid collection device is used in conjunction with screening and confirmatory tests for HIV-1 antibodies and other analytes. This device consists of a small, treated cotton-fiber pad on a handle that is placed in a person s mouth for two to five minutes. The device collects oral mucosal transudate (OMT), a serum-derived fluid that contains higher concentrations of certain antibodies and analytes than saliva. As a result, OMT testing is a highly accurate method for detecting HIV-1 infection and other analytes.

The OraSure® collection device is FDA approved for use in the detection of HIV-1 antibodies and 510(k) cleared for the detection of cocaine and cotinine in oral fluid specimens. In addition, we have received a CE mark for the OraSure® device and our cocaine and cotinine assays, all of which are sold through distributors in Canada, the United Kingdom, Mexico and certain other foreign countries.

HIV-1 antibody detection using the OraSure® collection device involves three steps:

Collection of an oral fluid specimen using the OraSure® device;

Screening of the specimen for HIV-1 antibodies at a laboratory with an enzyme immunoassay ( EIA ) screening test approved by the FDA for use with the OraSure<sup>®</sup> device: and

Laboratory confirmation of any positive screening test results with our oral fluid Western blot HIV-1 confirmatory test (described below).

A trained health care professional then conveys test results and provides appropriate counseling to the individual who was tested.

We believe that oral fluid testing has several significant advantages over blood or urine-based systems for infectious disease testing, for both health care professionals and the individuals being tested. These advantages include eliminating the risk of needle-stick accidents, providing a non-invasive collection technique, requiring minimal training to administer, providing rapid and efficient collection in almost any setting, and reducing the cost of administration by a trained health care professional.

Intercept® Drug Testing System

A collection device that is substantially similar to the OraSure® device is sold by us under the name Intercept®, and is used to collect OMT for oral fluid drug testing. We have received FDA 510(k) clearance to use the Intercept® collection device with laboratory-based EIAs to test for drugs of abuse commonly identified by the National Institute for Drug Abuse (NIDA) as the NIDA-5 (i.e., tetrahydrocannabinol (THC) or marijuana), cocaine, opiates, amphetamines/methamphetamines and phencyclidine (PCP)), and for barbiturates, methadone and benzodiazepines. Each of these EIAs is also FDA 510(k) cleared for use with the Intercept® device. Our Intercept® device and oral fluid assays are sold in the U.S. primarily through laboratory distributors.

We have received a CE mark for the Intercept<sup>®</sup> device and our oral fluid assays and distribute these products in Canada, the United Kingdom and Mexico.

We believe that the Intercept® device has several advantages over competing urine and other drugs-of-abuse testing products, including its lower total testing cost, its non-invasive nature, mobility and accuracy, the ease of maintaining a chain-of-custody, the treatment of test subjects with greater dignity, no requirement for specially-prepared collection facilities and difficulty of sample adulteration. The availability of an oral fluid test is intended to allow our customers to test for drug impairment and eliminate scheduling costs and inconvenience, thereby streamlining the testing process.

In an effort to expand our Intercept® product line and meet the needs of our laboratory customers, we have jointly developed with Roche Diagnostics a series of homogeneous fully-automated oral fluid drugs of abuse

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assays. These assays use Roche s KIMs (kinetic interaction of micro-particles in solution) technology and will run on various automated analyzers to allow oral fluid samples to be processed with the same efficiency currently achieved by our laboratory customers with urine-based drug tests. FDA 510(k) clearance has been received for assays to detect PCP, opiates, cocaine, methamphetamines and amphetamines. Clinical studies for THC and barbiturate assays are in process.

The high-throughput assays will be distributed in the U.S. and internationally by OraSure and Roche pursuant to a commercialization agreement between the parties. Sales of the assays in the U.S. are expected to begin in 2012.

Cryosurgical Systems (Skin Lesion Removal Products)

The Histofreezer® cryosurgical removal system is a low-cost alternative to liquid nitrogen and other methods for removal of warts and other benign skin lesions by physicians. The Histofreezer® product mixes three cryogenic gases in a small aerosol canister. When released, these gases are delivered to a specially designed foam bud, cooling the bud to a maximum of 50°C to 55°C. The frozen bud is then applied to the wart or lesion for 15 to 40 seconds (depending on the type of lesion) creating localized destruction of the target area by freezing. We have received 510(k) clearance for use of the Histofreezer® product to remove common warts and eight other types of benign skin lesions, and this product has been CE marked and registered for distribution in Canada, throughout Europe and in certain other foreign countries.

Internationally, we sell an OTC cryosurgical product through our distributor Genomma Labs, under the POINTTS tradename, in Mexico and a number of South and Central American countries. We also sell a CE marked cryosurgical wart removal product into the OTC footcare market in Europe, Australia and New Zealand through our distributor, Reckitt Benckiser (Reckitt), under the Scholl and Dr. Scholl trademarks. Reckitt is the owner of the Scholl and Dr. Scholl trademarks in countries outside North and South America. In 2011, we began selling OTC cryosurgical products for the treatment of both warts and skin tags to retailers in Canada on a private label basis.

## Molecular Collection Systems

Our wholly-owned subsidiary, DNAG, sells a number of products that provide all-in-one systems for the collection, stabilization, transportation, and storage of DNA and/or RNA from human and animal biologic samples. DNAG s lead product is sold under the Oragene name and is used to collect DNA from human saliva. DNAG products are currently sold to thousands of academic and research customers in many countries worldwide.

DNAG products are available in several different configurations and contain proprietary chemical solutions that are optimized for the specific application each product is designed for. Product physical design is focused on providing easy-to-use and reliable products for self or assisted collection of samples. For example, several of the Oragene® products require users to simply hold the product close to their mouth and spit into the collection device. When the container is closed the reagents stored in the lid of the container are mixed with the captured saliva and immediately protect the nucleic acids in the sample. This non-invasive collection method yields nucleic acid that remains stable at ambient temperature for extended periods. The stabilizing technology results in high quality and high quantity nucleic acids that are required for most genetic testing and analysis methods.

We believe these products provide significant advantages over competing DNA and RNA collection methods such as blood collection or buccal swabs, particularly in human genetic applications. Benefits include the reliable collection of high quality genetic samples, use of simple non-invasive collection methods, the ability to store and transport collected samples for extended periods at ambient temperatures and compatibility with fully-automated laboratory testing systems.

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DNAG products historically have been sold primarily as Class I medical devices for use by research and academic institutions. In late 2011, DNAG received FDA 510(k) clearance for the Oragene® Dx product and began marketing this product to clinical diagnostics and personalized medicine customers in the U.S. in the first quarter of 2012. This clearance will enable the Oragene® Dx product to be used with other FDA-cleared molecular diagnostic applications.

Immunoassay Tests and Reagents

We develop and sell immunoassay tests in two formats, known as MICRO-PLATE and AUTO-LYTE®, to meet the specific needs of our customers.

In a MICRO-PLATE kit, the sample to be tested is placed into a small plastic receptacle, called a microwell, along with the reagents. The result of the test is determined by the color of the microwell upon completion of the reaction. Controlling the reaction involves the use of reagents by laboratory personnel. Test results are analyzed by any of a variety of commercially available laboratory instruments, which we may also provide to our laboratory customers. MICRO-PLATE tests can be performed on commonly used instruments and can detect drugs in urine, serum and sweat specimens. MICRO-PLATE tests are also used as part of the Intercept® product line to detect drugs of abuse in oral fluid specimens.

AUTO-LYTE® tests are sold in the form of bottles of liquid reagents. These reagents are run on commercially available laboratory-based automated analytical instruments, which are manufactured by a variety of third parties. AUTO-LYTE® is typically used in high volume, automated, commercial reference insurance laboratories to detect certain drugs or chemicals in urine. Test results are produced quickly, allowing for high throughput. Our AUTO-LYTE® tests continue to face strong competition from cheaper home-brew tests developed internally by our laboratory customers. As a result, we may eventually stop selling our AUTO-LYTE® tests.

Western blot HIV-1 Confirmatory Test

We sell an oral fluid Western blot HIV-1 confirmatory test that received premarket approval from the FDA in 1996. This test uses the original specimen collected with the OraSure® oral fluid collection device to confirm positive results of initial oral fluid HIV-1 EIA screening tests.

Q.E.D.® Saliva Alcohol Test

Our Q.E.D.® saliva alcohol test is a point-of-care test device that is a cost-effective alternative to breath or blood alcohol testing. The test is a quantitative, saliva-based method for the detection of ethanol, has been cleared for sale by the FDA and has received a CLIA waiver. The U.S. Department of Transportation ( DOT ) has also approved the test.

Each Q.E.D.® test kit contains a collection stick that is used to collect a sample of saliva and a disposable detection device that displays results in a format similar to a thermometer. The Q.E.D.® device is easy to operate and instrumentation is not required to read the result. The product has a testing range of 0 to 0.145% blood alcohol and produces results in approximately two minutes.

# **Products Under Development**

OraQuick® Platform

We believe that OraQuick® has significant potential as a point-of-care testing platform for clinics and other public health entities, hospitals, physicians offices and other markets. Because the OraQuick platform is simple to use and can operate in a non-invasive manner with oral fluid, we believe it will be suitable for use by

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consumers without the assistance of a doctor or other medical professional. We also believe that OraQuick® provides a platform technology that can be modified for detection of a variety of infectious diseases in addition to HIV, such as viral hepatitis and certain sexually transmitted diseases.

We are currently devoting significant resources to obtaining FDA approval to sell our OraQuick® HIV-1/2 test in the United States OTC market. We have developed an information and referral system and product packaging and labeling suitable for the OTC market. In 2011, we completed the final phase of clinical testing for this product and submitted the final of three modules to our pre-market approval, or PMA, application to the FDA.

Several other new products based on the OraQuick® technology platform are in varying stages of development. A second generation rapid HIV-1/2 antibody test, which we believe will provide improved performance compared to our current product, is being developed and the feasibility of several assays for certain other infectious diseases is being evaluated.

OraSure®/Intercept® Applications

Oral mucosal transudate, or OMT, contains many constituents found in blood and serum, although in lower concentrations. We believe the OraSure® and Intercept® devices are a platform technology with a wide variety of potential applications, where laboratory testing is available. For example, the OraSure® device may be useful for the collection of a variety of antibodies or markers for infectious diseases or conditions in addition to HIV-1, such as antibodies to viral hepatitis.

Since January 2011, the Drug Testing Advisory Board ( DTAB ) has been evaluating oral fluid as a potential alternative specimen to be permitted under the Mandatory Guidelines for Federal Workplace Drug Testing Programs (the Guidelines ). The Guidelines govern workplace drug testing of federally-regulated workers. Based on its evaluation, DTAB has recommended that oral fluid be included as an alternative specimen in the Guidelines, and the Substance Abuse and Mental Health Services Administration has approved this recommendation. If and when issued in final form, these regulations will likely require certain modifications to our Intercept® product in order to permit its use by federal workers. As a result, we are developing modifications to the Intercept® collection device that we anticipate will be required by these regulations or otherwise desired by our customers. This new version of our Intercept® device is also expected eventually to be used with the high-throughput drug assays jointly developed with Roche Diagnostics.

## Molecular Collection Systems

Molecular testing in both the research and clinical diagnostics markets continues to evolve at a rapid pace. As a result, we expect to continue development activities designed to modify the capabilities and fit of the DNAG products to meet the evolving needs of existing and potential molecular testing market applications. To address unique customer needs, we will continue to develop new chemical and/or physical platforms as needed by our customers. DNAG has a number of development projects underway to expand its product offerings in three primary market segments human genetics, infectious disease testing and animal testing.

# **Research and Development**

In 2011, our research and development activities focused primarily on clinical and regulatory activities related to obtaining a CLIA waiver for our OraQuick® HCV test, completing the final phase of clinical testing and preparing and filing a PMA application for FDA approval of an OraQuick® HIV OTC test, development of next generation versions of our OraQuick® HIV and Intercept® products and assessing initial feasibility of certain other products.

From time to time, we have contracted with third parties to conduct research and development activities and we may do so in the future.

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Research and development expenses were \$18.4 million in 2011 (including \$1.0 million of DNAG expenses since the August 2011 acquisition), \$13.2 million in 2010 and \$13.4 million in 2009. These expenses include our costs associated with research and development, regulatory affairs, clinical trials and product support.

## Sales and Marketing

We attempt to reach our major target markets through a combination of direct sales, strategic collaborations and independent distributors. Our marketing strategy is to create or raise awareness through a full array of marketing activities, which include trade shows, print advertising, special programs and distributor promotions, in order to stimulate sales in each target market.

We market our products in the United States and internationally. Revenues attributable to customers in the United States were \$67.6 million, \$63.5 million and \$62.2 million in 2011, 2010 and 2009, respectively. Revenues attributable to international customers amounted to \$14.2 million, \$11.5 million and \$14.8 million, or 17%, 15% and 19% of our total revenues, in 2011, 2010 and 2009, respectively. For more information about our revenues and long-lived assets attributable to U.S. and international customers, please see Note 12 to our consolidated financial statements included elsewhere in this Annual Report.

# Infectious Disease Testing

We market the OraQuick *ADVANCE*® rapid HIV-1/2 antibody test directly to customers in the public health market for HIV testing. This market consists of a broad range of clinics and laboratories and includes states, counties, and other governmental agencies, family planning clinics, colleges and universities, correctional facilities and the military. There are also a number of organizations in the public health market, such as AIDS service organizations and various community-based organizations, that are set up primarily for the purpose of encouraging and enabling HIV testing. We also sell our OraQuick *ADVANCE*® test directly to hospitals in the U.S. and through distributors into the U.S. physician market. In 2010, we engaged two manufacturers representative organizations to assist with sales to U.S. physicians.

Internationally, we distribute our OraQuick® HIV test in Europe and other foreign countries. We expect to increase the number of countries where this product is sold as we find new distributors and complete registrations in additional countries.

We market the OraSure® oral fluid collection device for HIV-1 testing, on its own and as a kit in combination with laboratory testing services. To better serve our public health customers, we have contracted a commercial laboratory to provide prepackaged OraSure® test kits, with prepaid laboratory testing and specimen shipping costs included. We also sell the OraSure® device in the international public health market.

Based on the FDA approvals in place during most of 2011, our OraQuick® HCV test has been sold primarily to customers operating CLIA-certified laboratories. In late 2011, we received a CLIA waiver for this product, which will enable us to expand sales to non-CLIA certified settings, primarily in the U.S. public health and physician office markets. We also sell this test in Europe and other countries through distributors.

We previously entered into agreements with Merck & Co. Inc. (Merck) to collaborate on the development and promotion of our OraQuick HCV test. Under the terms of these agreements, we have been and in the future may be reimbursed by Merck for a portion of our costs to develop the test and obtain regulatory approvals. Merck will also provide detailing and other promotional support for the test in the physicians office market in the United States and internationally.

We have distribution rights to an FDA 510(k) cleared rapid flu A&B test, which we market under our proprietary OraSure QuickFlu tradename. Under our agreement with the supplier of this product, we are permitted to sell this product into the U.S. hospital and public health markets.

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Substance Abuse Testing

Our substance abuse testing products are marketed to laboratories serving the workplace testing, forensic toxicology, criminal justice and drug rehabilitation markets in the U.S. and in certain international markets.

We have entered into agreements for the distribution of Intercept® collection devices and associated MICRO-PLATE assays for drugs-of-abuse testing in the workplace testing market in the United States and Canada through several laboratory distributors and internationally for workplace, criminal justice and forensic toxicology testing through other distributors. In some cases, we assist our laboratory customers in customizing their testing services by selling them equipment required to test oral fluid specimens collected with the Intercept® device.

We also market the Intercept<sup>®</sup> collection device on its own and as a kit in combination with laboratory testing services. To better serve our workplace customers, we have contracted with commercial laboratories to provide prepackaged Intercept<sup>®</sup> test kits, with prepaid laboratory testing and specimen shipping costs included.

The criminal justice market in the United States for our substance abuse testing products consists of a wide variety of entities in the criminal justice system that require drug screening, such as pre-trial services, parole and probation offices, police forces, drug courts, prisons, drug treatment programs and community/family service programs. The forensic toxicology market consists of several hundred laboratories including federal, state and county crime laboratories, medical examiner laboratories and reference laboratories.

As discussed above, the FDA has issued 510(k) clearances for the use of fully-automated high-throughput oral fluid assays for the detection of PCP, opiates, cocaine, methamphetamines and amphetamines with oral fluid samples collected with our Intercept® device. In 2012, we expect to begin selling the cleared assays as part of our Intercept® drug testing system into the workplace, criminal justice, hospital and government markets in collaboration with Roche Diagnostics.

We distribute our Q.E.D.® saliva alcohol test primarily through various distributors in the United States and internationally. The markets for alcohol testing are relatively small and fragmented with a broad range of legal and procedural barriers to entry. Markets range from law enforcement testing to workplace testing of employees in safety sensitive occupations. Typical usage situations include pre-employment, random, post-accident, reasonable-cause and return-to-duty testing.

## Cryosurgical Systems

Most of our Histofreezer® sales occur in the United States to distributors that, in turn, resell the product to primary care physicians and podiatrists in the United States. Our major U.S. distributors include Cardinal Healthcare, McKesson HBOC, Physicians Sales & Service, AmerisourceBergen Corporation, and Henry Schein. We have also engaged two manufacturers representative organizations to help our U.S. distributors promote and sell Histofreezer®. Internationally, we sell the Histofreezer® product through a network of distributors in more than 20 countries worldwide.

We distribute cryosurgical wart removal products in the OTC footcare market in Europe, Australia and New Zealand through our distributor, Reckitt Benckiser, under its Scholl and Dr. Scholl tradenames, and in the OTC markets in Mexico and several Central and South American countries under the POINTTS tradename through our distributor, Genomma Labs. In 2011, we began selling OTC cryosurgical products for the removal of warts and skin tags under private label arrangements with retailers in Canada.

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Insurance Risk Assessment

We currently market the OraSure® oral fluid collection device for use in screening life insurance applicants in the United States and internationally to test for three of the most important underwriting risk factors: HIV-1, cocaine and cotinine (a metabolite of nicotine). Devices are sold to insurance testing laboratories, which in turn sell the devices to insurance companies, usually in combination with testing services.

We also promote use of the OraSure® device directly to insurance companies for life insurance risk assessment. Insurance companies then make their own decision regarding which laboratory to use to supply their collection devices and testing services. We sell our OraSure® Western blot confirmatory test directly to insurance testing laboratories for use in confirming oral fluid specimens collected with our OraSure® device that initially test positive for HIV-1.

There exists a wide range of policy limits where our OraSure® product is being used. In general, many (but not all) of our insurance company customers use the OraSure® device in connection with life insurance policies having face amounts of up to \$250,000, with some customers using the device for policies of up to \$500,000 in amount. Some insurance companies have chosen to extend their testing to lower policy limits where they did not test at all before, while others have used OraSure® to replace some of their blood and urine-based testing. More recently, some insurance customers have adopted a Simplified Issues policy, where lab testing is no longer required and instead the applicant completes a questionnaire about personal behaviors.

We also sell our AUTO-LYTE® assays and reagents in the insurance testing market directly to certain laboratories.

Molecular Collection Systems

DNAG primarily sells its products directly to its customers through its own global sales force. In some countries distributors are used, particularly in the Asia-Pacific region. Over half of DNAG s employees work in the areas of sales, marketing, business development or product management. The significant majority of employees who deal directly with customers have molecular science backgrounds, which we believe is useful in selling and marketing molecular collection products, and more importantly, in identifying and evaluating new market and business opportunities.

Historically, most of DNAG revenues have been derived from product sales into the academic and research markets. A significant portion of DNAG s sales is derived from repeat customers. The clinical diagnostic market for human genetics is still in its early stages with only a few diagnostic customers currently using DNAG s products. DNAG has a number of established global customers in the livestock market, including breed associations and research institutions. Finally, a molecular collection product focused on the infectious disease testing market was launched by DNAG in mid-2011.

## **Significant Products and Customers**

Several different products have contributed significantly to our financial performance, accounting for 10% or more of our total revenues during the past three years. The OraQuick® rapid HIV testing products, the cryosurgical systems products, and the OraSure® and Intercept® oral fluid collection devices accounted for total revenues of \$41.7 million, \$12.0 million and \$10.7 million in 2011, \$40.0 million, \$11.9 million and \$11.2 million in 2010, and \$43.8 million, \$10.9 million and \$12.5 million in 2009, respectively.

We had no individual customers who accounted for more than 10% of our total revenues in 2011, 2010, or 2009.

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# **Financial Information by Segment**

We operate our business within two reportable segments. The first is our core OraSure business, which consists of the development, manufacture and sale of oral fluid diagnostic products and specimen collection devices and the manufacture and sale of medical devices used for the removal of benign skin lesions by cryosurgery. The second segment is the business of our newly acquired subsidiary, DNAG, which is based in Ottawa, Canada and manufactures and sells oral fluid collection devices that are used to collect samples of genetic material for molecular testing.

OraSure revenues consist primarily of product sold into the United States and internationally to various clinical laboratories, hospital, clinics, community-based organizations and other public health organizations, distributors, government agencies, physicians offices, and commercial and industrial entities. OraSure also derives revenues from licensing and production development activities. DNAG revenues consist of product sold into the Unites States and internationally in the academic research, clinical genetic testing, pharmacogenomics, personalized medicine, animal and livestock genetics markets. For more information about our revenues from external customers, income and total assets, please see the sections entitled Selected Consolidated Financial Data and Management's Discussion and Analysis of Financial Condition and Results of Operations and Note 12 to the consolidated financial statements, included elsewhere in this Annual Report.

## **Supply and Manufacturing**

Our OraQuick *ADVANCE*® HIV test, OraQuick® HCV test, OraSure® and Intercept® collection devices, Western blot HIV-1 confirmatory test, AUTOLYTE and MICRO-PLATE assays and QED® saliva alcohol test are all manufactured in our Bethlehem, Pennsylvania facilities. We expect to continue to manufacture these products at this location for the foreseeable future.

We have contracted with a third party in Thailand for the assembly of the OraQuick® HIV device, in order to supply certain international markets. This supply agreement had an initial term of one year, and automatically renews for additional annual periods unless either party provides a timely notice of termination prior to the end of an annual period. We believe that other firms would be able to manufacture the OraQuick® test on terms no less favorable than those set forth in the agreement if the Thailand contractor would be unable or unwilling to continue manufacturing this product.

We can purchase the HIV antigens and the nitrocellulose used in the OraQuick® test, the HCV antigens used in the OraQuick® HCV test and the antigen used in the Western blot HIV-1 confirmatory test only from a limited number of sources. If for any reason these suppliers are unwilling or no longer able to supply our antigen or nitrocellulose needs, we believe that alternative supplies could be obtained at a competitive cost. However, a change in any of the antigens or nitrocellulose used in our products would require FDA approval and some additional development work. This in turn could require significant time to complete and could disrupt our ability to manufacture and sell the affected products.

Our MICROPLATE and AUTO-LYTE assays require the production of highly specific and sensitive antibodies corresponding to the antigen of interest. Substantially all our antibody requirements are provided by contract suppliers. We believe that we have adequate reserves of antibody supplies and that we have access to sufficient raw materials for these products.

Our OraSure QuickFlu test is manufactured and supplied by a third party, Princeton BioMeditech.

The Histofreezer® product sold in the U.S. is assembled by U.S. vendors and the Histofreezer® product sold internationally is assembled in the Netherlands by Koninklijke, Utermöhlen, N.V., the company from which we acquired the product in 1998. The cryosurgical wart removal products distributed in OTC markets are also assembled by vendors located in the United States. We believe that additional suppliers of all of our cryosurgical products are available on terms no less favorable than the terms of our existing supply agreements in the event that our current suppliers would be unable or unwilling to continue manufacturing these products.

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DNAG has engaged two third-party manufacturers to supply virtually all of its products, including the Oragene® product line. Many of the raw materials and components used in these products are also purchased from third parties, including one critical component that is purchased from a sole source supplier. We believe there are other suppliers that can manufacture and supply the raw materials and components for the DNAG products.

# **Employees**

As of December 31, 2011, we had 308 full-time employees (including 77 employees at our subsidiary, DNAG), including 105 in sales, marketing and client services; 35 in research and development; 116 in operations, manufacturing, quality control, information systems, purchasing and shipping; 21 in regulatory affairs; and 31 in administration and finance. This compares to 231 employees as of December 31, 2010. Our employees are not currently represented by a collective bargaining agreement.

#### Competition

The diagnostic industry is a multi-billion dollar international industry and is intensely competitive. Many of our competitors are substantially larger than we are, and they have greater financial, research, manufacturing and marketing resources.

Important competitive factors for our products include product quality, performance, price, ease of use, customer service and reputation. Industry competition is based on the following:

Scientific and technological capability;
Proprietary know-how;
The ability to develop and market products and processes;
The ability to obtain FDA or other regulatory approvals;
The ability to manufacture products that meet applicable FDA requirements (i.e., good manufacturing practices);
Commercial execution and strength of distribution;
Access to adequate capital;
The ability to attract and retain qualified personnel; and

A few large corporations produce a wide variety of diagnostic tests and other medical devices and equipment. A larger number of mid-size companies generally compete only in the diagnostic industry and a significant number of small companies produce only a few diagnostic products. As a result, the diagnostic test industry is highly fragmented and segmented.

The availability of patent protection.

The future market for diagnostic tests is expected to be characterized by consolidation, greater cost consciousness and tighter reimbursement policies. The purchasers of diagnostic products are expected to place increased emphasis on lowering costs, reducing inventory levels,

automation, service and volume discounts. The increased complexity of the market is expected to force many competitors to enter into joint ventures or license certain products or technologies.

We expect competition to intensify as technological advances are made and become more widely known, and as new products reach the market. Furthermore, new testing methodologies could be developed in the future that render our products impractical, uneconomical or obsolete. There can be no assurance that our competitors

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will not succeed in developing or marketing technologies and products that are more effective than those we develop or that would render our technologies and products obsolete or otherwise commercially unattractive. In addition, there can be no assurance that our competitors will not succeed in obtaining regulatory approval for these products, or introduce or commercialize them, before we can do so. These developments could have a material adverse effect on our business, financial condition and results of operations.

Several companies market or have announced plans to market oral specimen collection devices and tests both within and outside the United States. We expect the number of devices competing with our OraQuick®, OraSure® and Intercept® devices to increase as the benefits of oral fluid-based testing become more widely accepted.

Competition in the HIV testing market is intense and is expected to increase. We believe that the principal competition will continue to come from existing laboratory-based blood tests, point-of-care rapid blood tests, laboratory-based urine assays or other oral fluid-based tests that may be developed. Our competitors include specialized biotechnology firms, as well as pharmaceutical companies with biotechnology divisions and medical diagnostic companies. Significant competitors for our OraQuick *ADVANCE*® rapid HIV-1/2 test, such as the Ortho Diagnostics division of Johnson & Johnson, Bio-Rad Laboratories and Abbott, sell laboratory-based HIV-1/2 EIAs, and Maxim Biomedical (formerly Calypte, Inc.) sells an HIV-1 screening test for urine, in the United States. MedMira and Trinity Biotech each sell competing rapid HIV-1 blood tests, and Bio-Rad Laboratories and Alere (formerly Inverness Medical) sell competing rapid HIV-1/2 blood tests in the United States. These tests compete with our OraQuick *ADVANCE*® test in hospitals and other laboratory settings. In addition, Trinity Biotech and Alere have received CLIA waivers for their rapid HIV tests, and these tests compete with our OraQuick *ADVANCE*® test in the markets outside of the traditional hospital and laboratory settings. These companies, or others, may continue to expand the bodily fluids with which a rapid HIV test may be performed, or develop and commercialize new rapid HIV tests, which would provide further competition for our OraQuick *ADVANCE*® test. We believe other companies may also seek FDA approval to sell competing rapid HIV tests in the future.

Internationally, our OraQuick *ADVANCE*® HIV test competes against rapid HIV tests sold by a number of other entities, and often these competing tests are sold at prices substantially below the prices we charge for our OraQuick *ADVANCE*® test. Alere and Trinity Biotech sell rapid HIV-1/2 blood tests outside the United States and Calypte has developed a rapid oral fluid HIV test which is now being sold in certain foreign countries. Lower priced rapid HIV blood tests are also sold internationally by various third parties.

The OraQuick® HCV test competes against laboratory-based HCV blood tests in the U.S. Major suppliers of these competing tests are Abbott Labs, Siemens, Ortho-Clinical Diagnostics, Roche and Bio-Rad. In non-U.S. countries, our OraQuick® HCV test competes against other rapid HCV blood tests in addition to the laboratory-based tests.

The OraSure QuickFlu test competes primarily against other rapid flu tests sold by various third parties into the U.S. hospital and public health markets. The principal suppliers of these competing tests include Quidel and Alere.

The Intercept<sup>®</sup> drug testing system competes with laboratory-based drug testing products and services using testing matrices such as urine, hair, sweat and oral fluid. Major competitors include Ansys Technologies, Dade Behring, Psychemedics and Immunalysis.

Our MICRO-PLATE oral fluid drug assays, which are sold for use with the Intercept® and OraSure® collection devices, continue to come under increasing competitive pressure from home-brew assays developed internally by our laboratory customers. Our oral fluid MICRO-PLATE assays also compete with urine-based homogeneous assays that are run on fully-automated, random access analyzers. These tests provide strong competitive pressure because they provide the benefits of automation, including lower costs and short

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turn-around times. In addition, we believe our competitors are developing oral fluid tests suitable for use on these fully automated homogeneous assay systems and these assays, if and when they are developed and commercialized, will represent a significant competitive threat to our oral fluid MICRO-PLATE business.

The fully-automated homogeneous oral fluid drugs of abuse assays, which were jointly developed with Roche Diagnostics for use with our Intercept<sup>®</sup> device, compete against both homogeneous urine assays, which have dominated the drug testing market for many years, and other homogeneous oral fluid assays that have come on the market more recently. Competing homogeneous urine assays are sold by a number of competitors. Competing oral fluid homogeneous assays are sold by Thermo Fisher and Immunologics.

Our MICRO-PLATE drugs-of-abuse reagents sold in the forensic toxicology market are targeted to forensic testing laboratories where sensitivity, automation and system solutions are important. In the past, these laboratories have typically had to rely on radioimmunoassay test methods to provide an adequate level of sensitivity. Radioimmunoassays require radioactive materials, which have a short shelf-life and disposal problems. Our MICRO-PLATE tests meet the laboratories sensitivity needs, run on automated equipment, are not radioimmunoassays, and are offered to the laboratory as a complete system solution of reagents, instrumentation and software to meet the specific needs of each customer. We compete with both homogeneous and heterogeneous tests manufactured by many companies. Significant competitors in the market for these assays include Thermo Scientific (formerly Microgenics, Inc.), Roche Diagnostics and Immunalysis.

Sales of our AUTO-LYTE® urine assays have declined substantially during the past several years, primarily due to competition from home-brew assays developed internally by our laboratory customers, which can be produced at a cost lower than the price typically paid for our products. Many of our customers no longer purchase our AUTO-LYTE® assays, and we may eventually stop selling this product line.

The Histofreezer® product s delivery system and operating temperature, which is warmer than liquid nitrogen, provide us with the opportunity to target sales to primary care physicians, such as family practitioners, pediatricians and podiatrists. We do not generally target sales to dermatologists because they have the volume of patients required to support the capital costs associated with a liquid nitrogen delivery system, which is also used to remove warts and other benign skin lesions. Major competitors for the Histofreezer® product include Cryosurgery, Inc. in the United States and Wartner in Europe. Competition in the international OTC markets comes primarily from cryosurgical products sold by Wartner and several other firms.

Q.E.D.<sup>®</sup> has two primary competitors, Ansys Technologies and Chematics. These companies offer semi-quantitative saliva-based alcohol tests and have received U.S. Department of Transportation approval. Indirect competitors who offer breath testing equipment include Intoximeters, Dräger and CMI. Although there are lower priced tests on the market that use oral fluid or breath as a test medium, these tests are qualitative tests that are believed to be substantially lower in quality and provide fewer benefits than our Q.E.D.<sup>®</sup> test.

Finally, DNAG s Oragen® product line competes against other types of collection devices used for molecular testing, such as blood collection devices and buccal swabs. These competing products are offered by a number of companies and are often sold for prices lower than the prices charged for the Oragene® products.

#### **Patents and Proprietary Information**

We seek patents and other intellectual property rights to protect and preserve our proprietary technology and our right to capitalize on the results of our research and development activities. We also rely on trade secrets, know-how, continuing technological innovations and licensing opportunities to provide competitive advantages for our products in our markets and to accelerate new product introductions. We regularly search for third-party patents in fields related to our business to shape our own patent and product commercialization strategies as effectively as possible and to identify licensing opportunities. United States patents generally have a maximum term of 20 years from the date an application is filed.

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We have ten United States patents and numerous foreign patents for the OraSure® and Intercept® collection devices and technology relating to oral fluid collection, containers for oral fluids, methods to test oral fluid, formulations for the manufacture of synthetic oral fluid, and methods to control the volume of oral fluid collected and dispersed. The patents expire from January 2013 to September 2022. We have also applied for additional patents, in both the United States and certain foreign countries, on such products and technology.

We have four United States patents for our OraQuick® platform, and we have several related patent applications pending in the United States and internationally. Three of these patents expire from March to July 2019 and the fourth in August 2027. We have obtained licenses to certain lateral flow patents and to certain HIV-1 and HIV-2 patents held by other parties. We also have obtained a license to certain HCV patents which we use to manufacture and sell a rapid HCV test on the OraQuick® technology platform. We obtained these licenses through the payment of certain upfront fees and an agreement to pay ongoing royalties. We believe these fees and royalties are comparable to those generally paid by other companies under similar arrangements.

One of the lateral flow patent licenses was obtained as part of a patent infringement litigation settlement with Alere (formerly Inverness Medical) in 2009. Under that license, royalties on net sales of our OraQuick® HIV products begin in 2013 and royalties on net sales of our OraQuick® HCV test begin in 2012.

We may need to obtain licenses or other rights under, or enter into distribution or other business arrangements in connection with, certain other intellectual property patents in order to manufacture and sell the OraQuick *ADVANCE*® HIV test or other tests that use the same or similar technology platform. See Section 1A, entitled Risk Factors, for a further discussion of these issues.

We have five United States patents and numerous foreign patents issued for apparatuses and methods for the topical removal of skin lesions relating to our cryosurgical wart removal products, and we have pending patent applications related to these products in the United States and in certain foreign countries. These patents expire from July 2012 to September 2025. We have also licensed another patent relating to apparatuses and methods for the topical removal of skin lesions relating to our cryosurgical wart removal products.

We hold, through our subsidiary, DNAG, six United States patents and numerous foreign patents issued for compositions, methods and apparatus for the collection, stabilization, transportation and storage of nucleic acids (DNA and RNA) from oral fluid and other bodily fluids and tissues. These patents expire from June 2023 through May 2030.

We require our employees, consultants, outside collaborators and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information developed by or made known to the individual during the course of the individual s relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees, the agreements provide that all inventions conceived by the individual during his or her tenure with us will be our exclusive property.

We own rights to trademarks and service marks that we believe are necessary to conduct our business as currently operated. In the United States, we own a number of trademarks, including the OraSure®, Intercept®, OraQuick®, OraQuick ADVANCE®, Histofreezer®, OraSure QuickFlu , Q.E.D.®, Oragene®, ORAcollect , OMNIgene , Performagene and AUTO-L®Tibademarks. We also own many of these marks and others in several foreign countries. With respect to our international OTC cryosurgical products, the Scholl and Dr. Scholl tradenames are owned by Reckitt Benckiser in Europe, Australia, New Zealand and other countries outside North and South America, and the POINTTS tradename is owned by Genomma Labs.

Although important, the issuance of a patent or existence of trademark or trade secret protection does not in itself ensure the success of our business. Competitors may be able to produce products competing with our patented products without infringing our patent rights. Issuance of a patent in one country generally does not prevent manufacture or sale of the patented product in other countries. The issuance of a patent is not conclusive

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as to validity or as to the enforceable scope of the patent. The validity or enforceability of a patent can be challenged by litigation after its issuance. If the outcome of such litigation is adverse to the owner of the patent, the owner s rights could be diminished or withdrawn. Trade secret protection does not prevent independent discovery and exploitation of the secret product or technique.

## **Government Regulation**

#### General

Most of our products are regulated by the FDA, certain state and local agencies and comparable regulatory bodies in other countries. This regulated environment governs almost all aspects of development, production and marketing, including product testing, authorizations to market, labeling, promotion, manufacturing and recordkeeping.

All of our FDA-regulated products require some form of action by the FDA before they can be marketed in the United States. After approval or clearance by the FDA, we must continue to comply with other FDA requirements applicable to marketed products. Both before and after approval or clearance, failure to comply with the FDA is requirements can lead to significant penalties or could disrupt our ability to manufacture and sell these products. In addition, the FDA could refuse permission to obtain certificates needed to export our products if the agency determines that we are not in compliance.

#### Domestic Regulation

Most of our products are regulated in the United States as medical devices.

There are two mechanisms by which regulated medical devices can be placed on the market in the United States. Some products may qualify for clearance under Section 510(k) of the Federal Food, Drug and Cosmetic Act. To obtain this clearance from the FDA, the manufacturer must provide a premarket notification that it intends to begin marketing the product, and show that the product is substantially equivalent to another legally marketed product (i.e., that it has the same intended use and is as safe and effective as a legally marketed device and does not raise different questions of safety and effectiveness). In some cases, the submission must include data from human clinical studies. Marketing may only commence when the FDA issues a clearance letter finding substantial equivalence. An applicant must submit a 510(k) application at least 90 days before marketing of the affected product commences. Although FDA clearance may be granted within that 90-day period, in some cases as much as a year or more may be required before clearance is obtained, if at all.

If the medical device does not qualify for the 510(k) procedure (either because it is not substantially equivalent to a legally marketed device or because it is required by statute and the FDA s regulations to have an approved premarket application, PMA), the FDA must approve a PMA before marketing can begin. PMAs must demonstrate, among other matters, that the medical device provides a reasonable assurance of safety and effectiveness. A PMA is typically a complex submission, including the results of preclinical and clinical studies. Preparing a PMA is a detailed and time-consuming process. Once a PMA has been submitted, the FDA is required to review the submission within 180 days. However, the FDA s review may be, and often is, much longer, often requiring one year or more, and may include requests for additional data and facility inspections before approval is granted, if at all.

Some of our products are used for research only or other non-medical purposes and many of our drugs-of-abuse products sold to state crime laboratories are for forensic use. The FDA does not currently regulate products used for these purposes.

Every company that manufactures medical devices distributed in the United States must comply with the FDA s Quality System Regulations (QSRs). These regulations govern the manufacturing process, including design, manufacture, testing, release, packaging, distribution, documentation and purchasing. In complying with the QSRs, manufacturers must continue to expend time, money and effort in the area of production and quality to

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ensure full technical compliance. Companies are also subject to other post-market and general requirements, including restrictions imposed on marketed products, promotional standards and requirements for recordkeeping and reporting of certain adverse reactions. If there are any modifications made to our marketed devices, a premarket notification or PMA may be required to be submitted to, and cleared or approved by, the FDA, before the modified device may be marketed. The FDA regularly inspects companies to determine compliance with the QSRs and other post-market requirements. Failure to comply with statutory requirements and the FDA s regulations can result in warning letters, monetary penalties, suspension or withdrawal of regulatory approvals, operating restrictions, total or partial suspension of production, injunctions, product recalls, seizure of products and criminal prosecution.

The Clinical Laboratory Improvement Amendments of 1988, or CLIA, prohibit any facility that does laboratory testing on specimens derived from humans from providing information for the diagnosis, prevention or treatment of any disease or impairment of, or the assessment of, the health of human beings, unless there is in effect for such facility a certificate issued by the U.S. Department of Health and Human Services applicable to the category of examination or procedure performed. Tests may be waived from this regulatory oversight if they meet certain requirements established under CLIA. We consider the applicability of the requirements of CLIA in the design and development of our products. We have obtained a waiver of the CLIA requirements for our OraQuick *ADVANCE*® rapid HIV-1/2 antibody test, our OraQuick® HCV rapid antibody test and our Q.E.D.® alcohol saliva test and may seek similar waivers for certain other products. A CLIA waiver allows certain customers to use the waived products that may not have been able to use them without complying with applicable quality control and other requirements.

Certain of our products may also be affected by state regulations in the United States. We are presently working with legislators or regulators in certain of these states in an effort to modify or remove any restrictions affecting our ability to sell products.

#### International

We are also subject to regulations in foreign countries governing products, human clinical trials and marketing, and may need to obtain approval from international public health agencies, such as the World Health Organization, in order to sell products in certain countries. Approval processes vary from country to country, and the length of time required for approval or to obtain other clearances may in some cases be longer than that required for U.S. governmental approvals. We generally pursue approval only in those countries that we believe have a significant market opportunity.

The International Organization for Standardization ( ISO ) is a worldwide federation of national standards bodies from some 130 countries, established in 1947. The mission of the ISO is to promote the development of standardization and related activities in the world with a view to facilitating the international exchange of goods and services. ISO certification is a pre-requisite to use of the CE mark and indicates that our quality system complies with standards applicable to activities ranging from initial product design and development through production and distribution. The CE mark is a European Union ( EU ) requirement to sell products that fall under the scope of the Medical Devices Directive ( MDD ) and the In Vitro Diagnostic Directive ( IVDD ). The CE mark is evidence that the manufacturer and the product meet the requirements of all applicable directives, including the MDD and IVDD.

We received authorization to use the CE mark for the OraQuick *ADVANCE*® HIV-1/2 test, the OraQuick® HCV test, the OraSure® and Intercept® collection devices, our Histofreezer® product line, our OTC cryosurgical removal product and certain of the Oragene® collection kits sold by DNA Genotek.

We must also comply with certain registration and licensing requirements as dictated by Health Canada, prior to commencing sales in Canada. We have completed this process for several of our current products and may do so with respect to other products in the future. In addition, Canadian law requires manufacturers of medical devices to have a quality management system that meets various ISO requirements in order to obtain a license to sell their devices in Canada.

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Anti-Kickback and Other Fraud and Abuse Laws

The Federal Anti-Kickback Statute prohibits the knowing and willful offer, payment, solicitation, or receipt of any form of remuneration in return for, or to induce:

The referral of a person;

The furnishing or arranging for the furnishing of items or services reimbursable under Medicare, Medicaid or other governmental programs; or

The purchase, lease, or order of, or the arrangement or recommendation of the purchasing, leasing, or ordering of any item or service reimbursable under Medicare, Medicaid, or other governmental programs.

Our products are or may be purchased by customers that will seek or receive reimbursement under Medicare, Medicaid or other governmental programs. Noncompliance with the federal anti-kickback legislation can result in exclusion from Medicare, Medicaid or other governmental programs, and/or restrictions on our ability to operate in certain jurisdictions, as well as civil and criminal penalties, any of which could have an adverse effect on our business and results of operations.

The Federal Civil Monetary Penalties Law prohibits the offering or transferring of remuneration to a Medicare or Medicaid beneficiary that the person knows or should know is likely to influence the beneficiary s selection of a particular supplier of Medicare or Medicaid payable items or services. Noncompliance can result in civil monetary penalties for each wrongful act, assessment of three times the amount claimed for each item or service and exclusion from the Federal healthcare programs.

Many states have also adopted some form of anti-kickback laws. A determination of liability under such laws could result in fines and penalties and restrictions on our ability to operate in these jurisdictions.

We are also subject to other federal and state laws targeting fraud and abuse in the healthcare industry, including false claims laws and marketing conduct laws and laws constraining the sales, marketing and other promotional activities of manufacturers of medical devices by limiting the kinds of financial arrangements, including sales programs, with physicians, hospitals, laboratories and other potential purchasers of medical devices. Violations of these laws may be punishable by criminal or civil sanctions, including substantial fines, imprisonment and exclusion from participation in government healthcare programs such as Medicare and Medicaid. These laws and regulations are wide ranging and subject to changing interpretation and application. In recent years, there has been greater scrutiny of marketing practices in the medical device industry which has resulted in several government investigations by various government authorities and the introduction and/or passage of federal and state legislation regulating interactions between medical device manufacturers and healthcare professionals and providers and requiring the disclosure by medical device manufacturers of gifts or other payments to healthcare professionals and providers. To be in compliance with such disclosure laws, we have implemented necessary systems for accurately tracking gifts and other payments.

We have implemented a written Policy on Interactions with Health Care Professionals, which is based on the Code of Conduct for Interactions with Health Care Professionals promulgated by the Advanced Medical Technology Association, or AdvaMed, a leading trade association representing medical device manufacturers. The Policy applies to all employees and is intended to comply with applicable state and federal laws, regulations and government guidance. The Policy addresses interactions related to sales and marketing practices, research and development, product training and education, grants and charitable contributions, support of third-party educational conferences, and consulting arrangements.

Foreign Corrupt Practices Act

The U.S. Foreign Corrupt Practices Act (FCPA) prohibits corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity. It is illegal to pay, offer to pay or authorize the payment of anything of value to any foreign government official, government

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staff member, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. Our present and future business has and will continue to be subject to the FCPA and various other laws, rules and/or regulations applicable to us as a result of our international sales.

**Environmental Regulation** 

Because of the nature of our current and proposed research, development, and manufacturing processes, we are subject to stringent federal, state and local laws, rules, regulations and policies governing the use, generation, manufacture, storage, air emission, effluent discharge and handling and disposal of materials and wastes.

The foregoing discussion of our business should be read in conjunction with the consolidated financial statements and accompanying notes included in Item 15 of this Annual Report.

#### ITEM 1A. Risk Factors

You should carefully consider the risks and uncertainties described below, together with all of the other information included in this Annual Report and our other SEC filings, in considering our business and prospects. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not disclosed or not presently known to us or that we currently deem immaterial also may impair our business operations. The occurrence of any of the following risks could harm our business, financial condition or results of operations.

## Regulatory Risks

The Need to Obtain Regulatory Approvals Could Increase Our Costs and Adversely Affect Our Financial Performance.

Many of our proposed and existing products are subject to regulation by the FDA and other governmental or public health agencies. In particular, we are subject to strict governmental controls on the development, manufacture, labeling, distribution and marketing of our products. In addition, we are often required to obtain approval or registration with foreign governments or regulatory bodies before we can import and sell our products in foreign countries.

The process of obtaining required approvals or registrations from governmental or public health agencies can involve lengthy and detailed laboratory testing, human clinical trials, sampling activities and other costly, time-consuming procedures. These approvals and registrations can require the submission of a large amount of clinical data which can be expensive and may require significant time to obtain. It is also possible that a product will not perform at a level needed to generate the clinical data required to obtain approval or registration. The submission of an application to the FDA or other international regulatory authority does not guarantee that an approval or registration to market the product will be received. A regulatory authority may impose requirements as a condition to granting an approval or registration, may include significant restrictions or limitations as part of any approval or clearance it grants and may delay or refuse to grant approval or registration, even though a product has been approved without restrictions or limitations in another country or by another agency.

In 2011, we completed the final phase of clinical studies for FDA approval of our OraQuick® HIV-1/2 test for sale in the United States OTC market, and we filed all three modules to our PMA application for this product. Since a rapid HIV test has never before been approved by the FDA for OTC use, its approval will depend on the FDA s evaluation of our PMA application and our further discussions with the agency and its advisory committees. There can be no assurance that the FDA will approve an OraQuick® HIV OTC test based on our clinical trials. Failure to obtain or any delay in obtaining this approval could result in significantly lower future revenues or increased costs and may adversely affect our financial performance and prospects.

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In addition, all *in vitro* diagnostic products that are to be sold in the EU must bear the CE mark indicating conformance with the essential requirements of the IVDD. We are not permitted to sell our products in the EU without a CE mark. We have obtained the CE mark for several of our existing products. We also intend to apply for CE marks for certain of our future products and are not aware of any material reason why we would be unable to obtain those marks. However, there can be no assurance that compliance with all provisions of the IVDD will be demonstrated and the CE mark will be obtained or maintained for all products that we desire to sell in the EU. The failure to obtain or maintain the CE mark for one or more of our products could lead to the termination of strategic alliances and agreements for sales of those products in the EU.

Our Ability to Respond to Changes in Regulatory Requirements Could Adversely Affect Our Business.

Newly promulgated regulations could require changes to our products, necessitate additional clinical trials or procedures, or could make it impractical or impossible for us to market our products for certain uses, in certain markets, or at all. In addition, the FDA and other regulatory authorities have the ability to change the requirements for obtaining product approval and/or impose new or additional requirements as part of the approval process. These changes or new or additional requirements may occur after the completion of substantial clinical work and other costly development activities. The implementation of such changes or new or additional requirements may result in additional clinical trials and substantial additional costs and can delay or make it more difficult or complicated to obtain product approvals.

Failure to Comply With FDA or Other Regulatory Requirements May Require Us to Suspend Production of Our Products or Institute a Recall Which Could Result in Higher Costs and a Loss of Revenues.

Our businesses are extensively regulated by the FDA and other federal, state and foreign regulatory agencies. Our suppliers and distributors often are subject to similar regulation. These regulations impact many aspects of our operations, and the operations of our suppliers and distributors, including manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion and record keeping. For example, our manufacturing facilities and those of our suppliers and distributors are, or can be, subject to periodic regulatory inspections. The FDA and foreign regulatory agencies may require post-marketing testing and surveillance to monitor the performance of approved products or place conditions on any product approvals that could restrict the commercial applications of those products. In addition, the subsequent discovery of previously unknown problems with a product may result in restrictions on the product, including withdrawal of the product from the market. We are also subject to routine inspection by the FDA and certain state agencies for compliance with Quality System Requirement and Medical Device Reporting requirements in the United States and other applicable regulations worldwide, including but not limited to ISO regulations.

Although we believe that we have adequate processes in place to ensure compliance with these requirements, the FDA or other regulatory bodies could force us to stop manufacturing, selling or exporting our products if it concludes that we are out of compliance with applicable regulations. The ability of our suppliers to supply critical components or materials and of our distributors to sell our products could be adversely affected if their operations are determined to be out of compliance. The FDA and other regulatory bodies could also require us to recall products if we fail to comply with applicable regulations, which could force us to stop manufacturing and selling such products. Such actions by the FDA and other regulatory bodies could adversely affect our revenues, costs and results of operations.

In the ordinary course of business, we must frequently make subjective judgments with respect to compliance with applicable laws and regulations. If regulators subsequently disagree with the manner in which we have sought to comply with these regulations, we could be subjected to substantial civil and criminal penalties, as well as product recall, seizure or injunction with respect to the sale of our products. The assessment of any civil and criminal penalties against us could severely impair our reputation within the industry and any limitation on our ability to manufacture and market our products could have a material adverse effect on our business.

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Our Inability to Manufacture Products in Accordance With Applicable Specifications, Performance Standards or Quality Requirements Could Adversely Affect Our Business.

The materials and processes used to manufacture our products must meet detailed specifications, performance standards and quality requirements to ensure our products will perform in accordance with their label claims, our customers—expectations and applicable regulatory requirements. As a result, our products and the materials used in their manufacture or assembly undergo regular inspections and quality testing. Factors such as defective materials or processes, mechanical failures, human errors, environmental conditions, changes in materials or production methods by our vendors, and other events or conditions could cause our products or the materials used to produce or assemble our products to fail inspections and quality testing.

Any failure or delay in our ability to meet the applicable specifications, performance standards or quality requirements could adversely affect our ability to manufacture and sell our products or comply with regulatory requirements. These events could, in turn, adversely affect our revenues and results of operations.

We Are Subject to Numerous Government Regulations in Addition to FDA Requirements, Which Could Increase Our Costs and Affect Our Operations.

In addition to the FDA and other regulations described previously, laws and regulations in some states may restrict our ability to sell products in those states. While we intend to work with state legislators and regulators to remove or modify any applicable restrictions, there is no guarantee we will be successful in these efforts.

We must also comply with numerous laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control, disposal of hazardous substances and labor or employment practices. Compliance with these laws or any new or changed laws regulating our business could result in substantial costs. Because of the number and extent of the laws and regulations affecting our industry, and the number of governmental agencies whose actions could affect our operations, it is impossible to reliably predict the full nature and impact of these requirements. To the extent the costs and procedures associated with complying with these laws and requirements are substantial or it is determined that we do not comply, our business and results of operations could be adversely affected.

Compliance With Regulations Governing Public Company Corporate Governance and Reporting is Complex and Expensive.

Many laws and regulations impose obligations on public companies, which have increased the scope, complexity and cost of corporate governance, reporting and disclosure practices. Examples include the Sarbanes-Oxley Act of 2002, the requirements of the NASDAQ Global Market, The Dodd-Frank Wall Street Reform and Consumer Protection Act, the SEC s requirements for public companies to provide financial statements in interactive data format using the eXtensible Business Reporting Language, or XBRL, and the International Financial Reporting Standards conversion requirements. Our implementation of certain aspects of these laws and regulations has required and will continue to require substantial management time and oversight and may require us to incur significant additional accounting and legal costs. We continually evaluate and monitor developments with respect to new and proposed rules and cannot predict or estimate the ultimate amount of additional costs we may incur or the timing of such costs. These laws and regulations are also subject to varying interpretations, in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. Although we are committed to maintaining high standards of corporate governance and public disclosure, if we fail to comply with any of these requirements, legal proceedings may be initiated against us and we may be harmed.

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Federal and State Laws Pertaining to Healthcare Fraud and Abuse Could Materially Adversely Affect Our Business, Financial Condition and Results of Operations.

We are subject to various federal and state laws targeting fraud and abuse in the healthcare industry, including anti-kickback laws, false claims laws, and laws constraining the sales, marketing and other promotional activities of manufacturers of medical devices by limiting the kinds of financial arrangements with physicians, hospitals, laboratories and other potential purchasers of medical devices. Violations of these laws are punishable by criminal or civil sanctions, including substantial fines, imprisonment and exclusion from participation in government healthcare programs such as Medicare and Medicaid. Many of the existing requirements are new and have not been definitively interpreted by state authorities or courts, and available guidance is limited. Unless and until we are in full compliance with these laws, we could face enforcement action and fines and other penalties, and could receive adverse publicity, all of which could materially harm our business. In addition, changes in or evolving interpretations of these laws, regulations, or administrative or judicial interpretations, may require us to change our business practices or subject our existing business practices to legal challenges, which could have a material adverse effect on our business, financial condition and results of operations.

# Risks Relating to Our Industry, Business and Strategy

Our Ability to Sell Products Could be Adversely Affected by Competition From New and Existing Diagnostic Products.

The diagnostics industry is focused on the testing of biological specimens in a laboratory or at the point of care and is highly competitive and rapidly changing. Many of our principal competitors have considerably greater financial, technical and marketing resources. As new products enter the market, our products may become obsolete or a competitor s products may be more effective or more effectively marketed and sold than ours. If we fail to maintain and enhance our competitive position, our customers may decide to use products developed by competitors which could result in a loss of revenues.

We also face competition from products that are sold at a lower price. Where this occurs, customers may choose to buy lower cost products from third parties or we may be forced to sell our products at a lower price, both of which could result in a loss of revenues or a lower gross margin contribution from the sale of our products. We may also be required to increase our marketing efforts in order to compete effectively, which would increase our costs.

Our Research, Development and Commercialization Efforts May Not Succeed and Our Competitors May Develop and Commercialize More Effective or Successful Diagnostic Products.

In order to remain competitive, we must regularly commit substantial resources to research and development and the commercialization of new or enhanced products. The research and development process generally takes a significant amount of time from product inception to commercial launch. This process is conducted in various stages. During each stage there is a substantial risk that we will not achieve our goals on a timely basis, or at all, and we may have to abandon a new or enhanced product in which we have invested substantial time and money.

During 2011, 2010 and 2009, we incurred \$18.4 million (including \$1.0 million of DNAG expenses since the August 2011 acquisition), \$13.2 million and \$14.3 million, respectively, in research and development expenses. We expect to continue to incur significant costs related to our research and development activities.

Successful products require significant development and investment, including testing, to demonstrate their cost-effectiveness or other benefits prior to commercialization. In addition, regulatory approval must be obtained before most products may be sold. Additional development efforts on these products can be required before any regulatory authority will review them. As noted above, regulatory authorities may not approve these products for commercial sale or can substantially delay or condition approval. In addition, even if a product is developed and

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all applicable regulatory approvals are obtained, there may be little or no market for the product. Accordingly, if we fail to develop and gain commercial acceptance for our products, or if competitors develop more effective products or a greater number of successful new products, customers may decide to use products developed by our competitors. This would result in a loss of revenues and adversely affect our results of operations, cash flow and business.

Failure to Achieve Our Financial and Strategic Objectives Could Have a Material Adverse Impact on Our Business Prospects.

As a result of any number of risk factors identified in this Annual Report, no assurance can be given that we will be successful in implementing our financial and strategic objectives, including our clinical development programs for a rapid HIV OTC test. In addition, the funds for research, clinical development and other projects have in the past come primarily from our business operations. If our business slows and we have less money available to fund research and development and clinical programs, we will have to decide at that time which programs to cut, and by how much. Similarly, if adequate financial, personnel, equipment or other resources are not available, we may be required to delay or scale back our strategic efforts. Our operations will be adversely affected if our total revenue and gross profits do not correspondingly increase or if our technology, product, clinical and market development efforts are unsuccessful or delayed. Furthermore, our failure to successfully introduce new or enhanced products and develop new markets could have a material adverse effect on our business and prospects.

If We Lose Our Key Personnel or Are Unable to Attract and Retain Qualified Personnel as Necessary, Our Business Could be Harmed.

Our success depends to a large extent upon the contributions of our executive officers, management and sales, marketing, operations and scientific staff. We may not be able to attract or retain a sufficient number of qualified employees in the future due to the intense competition for qualified personnel among medical products and other life science businesses. We generally do not enter into employment agreements requiring our employees to work for us for any specified period.

If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that will adversely affect our ability to effectively manufacture, sell and market our products, to meet the demands of our strategic partners in a timely fashion, or to support research, development and clinical programs. Although we believe we will be successful in attracting and retaining qualified personnel, competition for experienced scientists and other personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms.

Acquisitions or Investments May Not Generate the Expected Benefits and Could Disrupt Our Ongoing Business, Distract Our Management, Increase Our Expenses and Adversely Affect Our Business.

We may enter into strategic acquisitions or investments as a way to expand our business. These activities, and their impact on our business, are subject to many risk factors, including the following:

Suitable acquisitions or investments may not be found or consummated on terms or schedules that are satisfactory to us or consistent with our objectives;

The benefits expected to be derived from an acquisition may not materialize and could be affected by numerous factors, such as regulatory developments, general economic conditions and increased competition;

We may be unable to successfully integrate an acquired company s personnel, assets, management systems, products and/or technology into our business;

Acquisitions may require substantial expense and management time and could disrupt our business;

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An acquisition and subsequent integration activities may require greater capital and other resources than originally anticipated at the time of acquisition;

An acquisition may result in the incurrence of unexpected expenses, the dilution of our earnings or our existing stockholders percentage ownership, or potential losses from undiscovered liabilities not covered by an indemnification from the seller(s) of the acquired business;

An acquisition may result in the loss of our or the acquired company s key personnel, customers, distributors or suppliers; and

An acquisition of a foreign business may involve additional risks, including, but not limited to, foreign currency exposure, liability or restrictions under foreign laws or regulations, and our inability to successfully assimilate differences in foreign business practices or overcome language or cultural barriers.

The occurrence of one or more of the above or other factors may prevent us from achieving all or a significant part of the benefits expected from an acquisition or investment. This may adversely affect our financial condition, results of operations and ability to grow our business or otherwise achieve our financial and strategic objectives.

In August 2011, we acquired DNAG with the expectation that the acquisition would result in benefits to both companies. However, we may not realize the financial, tax and other benefits of the acquisition to the extent, or in the timeframe, anticipated. For example, the acquisition could result in the loss of key employees, diversion of each company s management s attention, the disruption or interruption of, or the loss of momentum in, each company s ongoing business or inconsistencies in standards, controls, procedures and policies, any of which could adversely affect either company s ability to maintain relationships with customers, licensors, collaborators, partners, suppliers and employees. These factors and others could negatively impact our ability to achieve the anticipated benefits of the acquisition, or could reduce our earnings or otherwise adversely affect the business and financial results of the combined company and, as a result, adversely affect the market price of our Common Stock.

Our Revenues Could be Affected by Third-Party Reimbursement Policies and Potential Cost Constraints.

The end-users of our products include hospitals, physicians and other healthcare providers. Use of our products could be adversely impacted if end-users do not receive adequate reimbursement for the cost of our products from their patients healthcare insurers or payors. Our net sales could also be adversely affected by changes in reimbursement policies of governmental or private healthcare payors, including in particular the level of reimbursement for our products.

In the United States, healthcare providers such as hospitals and physicians who purchase diagnostic products generally rely on third-party payors, such as private health insurance plans, Medicare and Medicaid, to reimburse all or part of the cost of the product and procedure. The overall escalating cost of medical products and services has led to, and will continue to lead to, increased pressures on the healthcare industry, both foreign and domestic, to reduce the cost of products and services. Given the efforts to control and reduce healthcare costs in the United States in recent years, currently available levels of reimbursement may not continue to be available in the future for our existing products or products under development. Third-party reimbursement and coverage may not be available or adequate in either the United States or international markets, current reimbursement amounts may be decreased in the future and future legislation, and regulation or reimbursement policies of third-party payors, may reduce the demand for our products or our ability to sell our products on a profitable basis.

Changes in Healthcare Regulation Could Affect Our Revenues, Costs and Financial Condition.

In recent years, there have been numerous initiatives on the federal and state levels for comprehensive reforms affecting the payment for, the availability of and reimbursement for healthcare services in the United

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States. These initiatives have ranged from proposals to fundamentally change federal and state healthcare reimbursement programs, including providing comprehensive healthcare coverage to the public under governmental funded programs, to minor modifications to existing programs. One example is the Patient Protection and Affordable Care Act, the Federal healthcare reform law enacted in 2010 ( Affordable Care Act ). Similar reforms may occur internationally.

Legislative and regulatory bodies are likely to continue to pursue healthcare reform initiatives and may continue to reduce the funding of the Medicare and Medicaid programs, including Medicare Advantage, in an effort to reduce overall federal healthcare spending. In addition, the new Affordable Care Act imposes a 2.3% excise tax on certain transactions, including U.S. sales of many medical devices, which we expect will include domestic sales of our products. This new tax is scheduled to take effect in 2013.

The ultimate content or timing of any healthcare reform legislation, and its impact on us, is impossible to predict. If significant reforms are made to the healthcare system in the United States, or in other jurisdictions, those reforms may increase our costs or otherwise have an adverse effect on our financial condition and results of operations.

New or Changed Testing Guidelines Could Affect Sales of Our Diagnostic Products.

From time to time, governmental agencies such as the Centers for Disease Control and Prevention ( CDC ) issue diagnostic testing guidelines or recommendations, which can affect the usage of our products. For example, several years ago, the CDC issued guidelines recommending routine HIV screening for all people ages 13 to 64, with more frequent testing for people at higher risk. These recommendations have resulted in increased HIV testing, including with our OraQuick ADVANCE® HIV-1/2 test. The CDC has also issued guidelines with respect to HCV testing and is expected to issue new HCV testing guidelines later in 2012. The issuance of new testing guidelines, or changes in existing guidelines, and the manner in which these new or changed guidelines are interpreted and applied by healthcare practitioners, could have a positive or negative impact on the degree to which our OraQuick® rapid HIV and HCV testing products are used. New or changed guidelines could affect the number of people tested, the frequency of testing and whether testing products such as our OraQuick® rapid HIV and HCV tests are used broadly for screening large populations or in a more limited capacity as a confirmatory test. These factors could in turn affect the level of sales of our products and our results of operations.

Reductions in Government Funding and Research Budgets Could Adversely Affect Our Business and Financial Results.

We sell our OraQuick *ADVANCE®* HIV-1/2 test and certain other products into the public health market which consists of state, county and other governmental public health agencies, community based organizations, service organizations and similar entities. We also sell these products into the hospital market, including to hospitals owned or operated by agencies of the U.S. government such as the Veterans Administration. Many of these customers depend to a significant degree on grants or funding provided by governmental agencies to run their operations including programs that use our products. In international markets, we often sell our products to or through foreign governmental agencies or parties funded by such agencies.

Our subsidiary, DNAG, sells many of its products to researchers at academic institutions, pharmaceutical and biotechnology companies, government laboratories and private foundations. Many of DNAG s research customers are dependent for their funding on grants from U.S. governmental agencies such as the U.S. National Institutes of Health and agencies in other countries.

The level of available government grants or funding in the U.S. and elsewhere is unpredictable and may be affected by various factors including the current economic downturn, future economic conditions, legislative and regulatory developments, political changes, civil unrest and changing priorities for research and development activities. Any reduction or delay in government funding could cause our customers to delay, reduce or forego purchases of our products.

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On August 2, 2011, President Obama signed into law the Budget Control Act of 2011, which was designed to reduce federal spending over the next 10 years by \$2.5 trillion. Under that law, a select committee of Congress was tasked with identifying and recommending \$1.2 trillion in spending cuts by late November 2011. Because the committee did not agree on spending cuts within that time frame, certain automatic cuts to discretionary, national defense and Medicare spending will be implemented beginning in January 2013 unless Congress takes further action. These cuts would result in Medicare payment reductions of up to 2% per fiscal year with a uniform percentage reduction across all Medicare programs starting in 2013. We cannot predict whether Congress will attempt to suspend or restructure the automatic budget cuts or what other deficit reduction initiatives may be proposed by Congress. Although the full impact is uncertain, additional spending cuts implemented under this new law could adversely affect our customers—ability to purchase our products. In addition, other legislative or regulatory changes may be adopted which could adversely affect our ability to sell our current products or successfully develop and commercialize new products.

Increases in Demand for Our Products Could Require Us to Expend Considerable Resources or Harm Our Customer Relationships if We are Unable to Meet That Demand.

If we experience significant or unexpected increases in the demand for our products, we and our suppliers may not be able to meet that demand without expending additional capital resources. These capital resources could involve the cost of new machinery or new manufacturing facilities. This would increase our capital costs, which could adversely affect our earnings. Our suppliers may be unable or unwilling to expend the necessary capital resources or otherwise expand their capacity. In addition, new manufacturing equipment or facilities may require FDA approval before they can be used to manufacture our products. To the extent we are unable to obtain or are delayed in obtaining such approvals, our ability to meet the demand for our products could be adversely affected.

If we or our suppliers are unable to develop necessary manufacturing capabilities in a timely manner, our sales could be adversely affected. If we fail to increase production volumes in a cost effective manner or if we experience lower than anticipated yields or production problems as a result of changes that we or our suppliers make in our manufacturing processes to meet increased demand, we could experience shipment delays or interruptions and increased manufacturing costs, which could also have a material adverse effect on our revenues and profitability.

Unexpected increases in demand for our products may require us to obtain additional raw materials in order to manufacture products to meet the demand. Some raw materials require significant ordering lead time and some are currently obtained from a sole supplier or a limited group of suppliers. We have long-term supply agreements with many of these suppliers, but these long-term agreements involve risks for us, such as our potential inability to obtain an adequate supply of raw materials and components and our reduced control over pricing, quality and timely delivery. It is also possible that one or more of these suppliers may become unwilling or unable to deliver materials to us. Any shortfall in our supply of raw materials and components, or our inability to quickly and cost-effectively obtain alternative sources for this supply, could have a material adverse effect on our ability to meet increased demand for our products. This could negatively affect our total revenues or cost of sales and related profits.

Our inability to meet customer demand for our products could also harm our customer relationships and impair our reputation within the industry. This, in turn, could have a material adverse effect on our business and prospects.

We Rely on Information Technology in Our Operations and Any Material Failure, Inadequacy, Interruption or Security Breach of that Technology Could Harm Our Ability to Efficiently Operate Our Business.

We rely heavily on information technology systems across our operations, including for management of inventory, purchase orders, invoices, shipping, interactions with our third-party logistics provider, revenue and expense accounting, online business and various other processes and transactions. Our ability to effectively

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manage our business, coordinate the production, distribution and sale of our products and ensure the timely and accurate recording and disclosure of financial information depends significantly on the reliability and capacity of these systems. The failure of these systems to operate effectively, problems with transitioning to upgraded or replacement systems, or a breach in security of these systems through a cyber attack or otherwise could cause delays in product sales and reduced efficiency of our operations. Significant capital investments could be required to remediate any such problem. Security breaches of employee information or other confidential or proprietary data could also adversely impact our reputation, and could result in litigation against us or the imposition of penalties.

## **Risks Relating to Collaborators**

The Use of Sole Supply Sources or Third-Party Suppliers For Critical Components of Our Products Could Adversely Affect Our Business.

We currently purchase certain critical components of our products from sole supply sources or other third party suppliers. For example, all of the HIV antigens and nitrocellulose required to make our OraQuick *ADVANCE*® HIV-1/2 test and OraQuick® HCV test is currently purchased from sole source suppliers. Our OraSure QuickFlu test is manufactured and supplied by a sole source supplier and the conjugates used in our MICROPLATE oral fluid drugs of abuse assays are obtained from third party suppliers.

In addition, our subsidiary, DNAG, uses two third party manufacturers to supply virtually all of its products, including its Oragene<sup>®</sup> line of collection kits. Many of the raw materials and components used in its products are also purchased from third parties, a critical one of which is obtained from a sole source supplier.

If our third-party suppliers are unable or unwilling to supply or manufacture a required component or product or if they make changes to a component, product or manufacturing process or do not supply materials meeting our specifications, we may need to find another source and/or manufacturer. This could require that we perform additional development work. We may also need to obtain FDA or other regulatory approvals for the use of the alternative component or changes to our products or manufacturing process. Completing that development and obtaining such approvals could require significant time and expense and such approvals may not occur at all. The availability of critical components and products from sole supply sources or other third parties could also reduce our control over pricing, quality and timely delivery. These events could either disrupt our ability to manufacture and sell certain of our products into one or more markets or completely prevent us from doing so, and could increase our costs. Any such event could have a material adverse effect on our results of operations, cash flow and business.

Our Failure to Maintain Existing Distribution Channels, or Develop New Distribution Channels, May Result in Lower Revenues.

We have marketed many of our products by collaborating with laboratories, diagnostic companies and distributors. Our sales depend to a substantial degree on our ability to sell products to these customers and on the marketing and distribution abilities of the companies with which we collaborate.

Relying on distributors or others to market and sell our products could harm our business for various reasons, including:

Our distributors or other customers may not fulfill their contractual obligations to us or otherwise market and distribute our products in the manner or at the levels we expect;

Agreements with distributors may terminate prematurely due to disagreements or may result in litigation between the parties;

We may not be able to renew existing distribution agreements on acceptable terms or at all;

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Our distributors may not devote sufficient resources or priority to the sale of our products;

Our existing distributor relationships or contracts may preclude or limit us from entering into arrangements with other distributors; and

We may not be able to negotiate future distribution agreements on acceptable terms or at all.

Although we will try to maintain and expand our business with distributors and customers and require that they fulfill their contractual obligations, there can be no assurance that such companies will do so or that new distribution channels will be available on satisfactory terms. As a result, our revenues and business could be adversely affected.

The Unavailability of an FDA-Approved HIV-1 EIA Screening Test Distributed by a Third Party Could Adversely Affect Sales of Our OraSure® Oral Fluid Collection Device.

In testing an oral fluid sample collected with an OraSure® device for HIV-1 in the United States, our customers must use an HIV-1 EIA screening test approved by the FDA for use with our OraSure® collection device. There is currently only one company, Avioq, Inc., that manufactures and sells such an FDA-approved screening test. If at some point in the future our customers cannot purchase the Avioq HIV-1 EIA or otherwise obtain an HIV-1 EIA screening test that has been approved by the FDA for use with our OraSure® collection device, sales of our OraSure® device could be negatively affected.

We May Need Strategic Partners to Assist in Developing and Commercializing Some of Our Diagnostic Products.

Although we intend to pursue some product opportunities independently, opportunities that require a significant level of investment for development and commercialization or a distribution network beyond our existing sales force may necessitate involving one or more strategic partners. Our strategy for development and commercialization of products may entail entering into arrangements with distributors or other corporate partners, universities, research laboratories, licensees and others. Relying on collaborative relationships could be risky to our business for a number of reasons, including:

We may be required to transfer material rights to such strategic partners, licensees and others;

Our collaborators may not devote sufficient resources or attach a sufficiently high priority to the success of our collaboration;

Our collaborators may not obtain regulatory approvals necessary to continue the collaborations in a timely manner;

Our collaborators may be acquired by another company and decide to terminate our collaborative arrangement or become insolvent;

Our collaborators may develop technologies or components competitive with our products;

Disagreements with collaborators could result in the termination of the relationship or litigation;

Collaborators may not have sufficient capital resources; and

We may not be able to negotiate future collaborative arrangements, or renewals of existing collaborative agreements, on acceptable terms or at all.

While we expect that our current and future collaborative partners have and will have an economic motivation to succeed in performing their contractual responsibilities, there is no assurance that they will do so and the amount and timing of resources to be devoted to these activities will be controlled by others. Consequently, there can be no assurance that any revenues or profits will be derived from such arrangements.

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We may need to collaborate with one or more third parties in order to commercialize our OraQuick® HIV-1/2 test in the United States OTC market should we receive approval from the FDA. In order to successfully commercialize an OraQuick® HIV OTC test, we and/or our collaborators may need to invest significantly in advertising and promotion in order to sell this product. If we are unable to collaborate with a third party having sufficient resources to assist in these efforts or find alternative distribution channels to access the OTC market, we may need to incur significant costs for advertising and promotion, and our ability to maximize our future revenues and profits from this opportunity could be adversely affected.

Actions of a Third-Party Inventory Management and Logistics Provider Could Adversely Affect Our Ability to Supply Products to our Customers.

In 2011, in order to improve efficiencies, we began using a third-party logistics provider to store and manage our finished goods inventory and ship finished product to our customers. We have selected a highly reputable provider with extensive experience in the logistics field and have negotiated a long-term agreement for these services. However, in the event our provider loses or damages our product, experiences a casualty or catastrophic event at its warehouse or otherwise fails to meet the requirements of our agreement for the safe storage and timely handling and delivery of our products, we could incur additional costs, experience difficulty in supplying our products to our customers or suffer damage to our reputation in the industry. These events could, in turn, reduce our revenues and adversely affect our results of operations.

## **Risks Relating to Intellectual Property**

Our Success Depends on Our Ability to Protect Our Proprietary Technology.

The diagnostics industry places considerable importance on obtaining patent, trademark and trade secret protection, as well as other intellectual property rights, for new technologies, products and processes. Our success depends, in part, on our ability to develop and maintain a strong intellectual property portfolio or obtain licenses to patents and technologies both in the United States and in other countries. If we cannot continue to develop, obtain and protect intellectual property rights, our revenue and gross profits could be adversely affected. Moreover, our current and future licenses or other rights to patents and other technologies may not be adequate for the operation of our business.

As appropriate, we intend to file patent applications and obtain patent protection for our proprietary technology. These patent applications and patents will cover, as applicable, compositions of matter for our products, methods of making those products, methods of using those products and apparatus relating to the use or manufacture of those products.

We will also rely on trade secrets, know-how and continuing technological advancements to protect our proprietary technology. We have entered, and will continue to enter, into confidentiality agreements with our employees, consultants, advisors and collaborators. Our employees and third-party consultants also sign agreements requiring that they assign to us interests in inventions and original expressions and any patents or copyrights arising from their work. However, these parties may not honor these agreements.

We cannot guarantee that the process of filing patents, the laws governing trade secrets and proprietary information, or any agreements we enter into with employees, consultants, advisors or collaborators will provide adequate protection of our intellectual property rights. Moreover, issued patents remain in effect for a fixed period and after expiration will not provide protection of the inventions they cover. Once our patents expire, we may be faced with increased competition, which could reduce our revenues. We may also not be able to successfully protect our rights to unpatented trade secrets and know-how. Others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets and know-how.

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Some of our employees, including scientific and management personnel, were previously employed by competing companies. Although we encourage and expect all of our employees to abide by any confidentiality agreement with a prior employer, competing companies may allege trade secret violations and similar claims against us.

We may collaborate with universities and governmental research organizations which, as a result, may acquire part of the rights to any inventions or technical information derived from our collaboration with them.

To facilitate development and commercialization of a proprietary technology base, we may need to obtain licenses to patents or other proprietary rights from other parties. Obtaining and maintaining such licenses may require the payment of substantial amounts. In addition, if we are unable to obtain these types of licenses, our product development and commercialization efforts may be delayed or precluded.

We May Become Involved in Intellectual Property Disputes, Which Could Increase our Costs and Limit or Eliminate Our Ability to Sell Our Products or Use Certain of Our Technologies in the Future.

From time to time, we may seek to enforce our patents or other intellectual property rights through litigation. In addition, there are a large number of patents and patent applications in our product areas, and additional patents may be issued to third parties relating to our product areas. We or our customers may be sued for infringement of patents or misappropriation of other intellectual property rights with respect to one or more of our products. Litigation in our industry regarding patent and other intellectual property rights is prevalent and is expected to continue.

Our industry is characterized by a large number of patents, claims of which appear to overlap in many cases. As a result, there is a significant amount of uncertainty regarding the extent of patent protection and infringement. Companies may have pending patent applications, which are typically confidential for the first eighteen months following filing, that cover technologies we incorporate in our products. Accordingly, we may be subjected to substantial damages for past infringement or be required to modify our products or stop selling them if it is ultimately determined that our products infringe a third party s proprietary rights. In addition, governmental agencies could commence investigations or criminal proceedings against our employees or us relating to claims of misuse or misappropriation of another party s proprietary rights.

Our involvement in litigation or other legal proceedings with respect to patents or other intellectual property and proprietary technology, either as a plaintiff or defendant, could adversely affect our revenues, market share, results of operations and business because:

As is common with major litigation, it could consume a substantial portion of managerial and financial resources;

Its outcome would be uncertain and a court may find that our patents are invalid or unenforceable in response to claims by another party or that the third-party patent claims are valid and infringed by our products;

An adverse outcome could subject us to the loss of the protection of our patents or to liability in the form of past royalty payments, penalties, reimbursement of litigation costs and legal fees, special and punitive damages, or future royalty payments significantly affecting our future earnings;

Failure to obtain a necessary license upon an adverse outcome could prevent us from selling our current products or other products we may develop or acquire;

The pendency of any litigation may in and of itself cause our distributors and customers to reduce purchases of our products; and

A court could award a preliminary and/or permanent injunction, which would prevent us from selling our current or future products.

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We may indemnify some customers and strategic partners under our agreements with such parties if our products or activities have actually or allegedly infringed upon, misappropriated or misused another party s proprietary rights. Further, our products may contain technology provided to us by other parties, such as contractors, suppliers or customers, and we may have little or no ability to determine in advance whether such technology infringes the intellectual property rights of a third party. These other parties may also not be required or financially able to indemnify us in the event that an infringement or misappropriation claim is asserted against us.

We may also become involved in other types of disputes regarding intellectual property rights, including state, federal or foreign court litigation, and patent interference, patent reexamination, patent reissue, or trademark opposition proceedings in the United States Patent and Trademark Office. Opposition or revocation proceedings could be instituted in a foreign patent office. An adverse decision in any proceeding regarding intellectual property rights could result in the loss or limitation of our rights to a patent, an invention or trademark.

The Sales Potential for Our OraQuick® Products Could be Affected by Our Ability to Obtain Certain Licenses and by Future Litigation.

Our OraQuick® test platform is a lateral flow assay that tests for specific antibodies or other substances. The term lateral flow generally refers to a test strip through which a sample flows and which provides a test result on a portion of the strip downstream from where the sample is applied. There are numerous patents in the United States and other countries which claim lateral flow assay methods and devices. There are also patents that cover the type of analyte or antibody (i.e., HIV-1, HIV-2, HCV, etc.) which our OraQuick® test is designed to detect. Some of these patents may broadly cover the aspects of our OraQuick® test and are in force in the United States and other countries. We may not be able to make or sell the OraQuick® test in the United States or other countries where these patents are in force.

We have obtained licenses under several lateral flow patents, and assays directed at specific analytes, which we believe are sufficient to permit the manufacturing and sale of the OraQuick® device as currently contemplated. However, licenses under additional patents may be required and it is possible that a third party could seek to enforce one or more patents against us.

If we are unable to successfully defend against or resolve patent infringement litigation or it is determined that a license is required and it is not possible to negotiate or otherwise obtain a license agreement on reasonable terms under a necessary patent, our ability to manufacture and sell OraQuick® devices and develop and commercialize new applications using the same technology could be limited and we may incur increased costs or damages. In such case, we may be able to modify the OraQuick® test to avoid the claim of infringement or the need for a license. However, this alternative could delay or limit our ability to sell the OraQuick® test in the United States and other markets, which would adversely affect our results of operations, cash flow and business.

## Risks Relating to Products, Marketing and Sales

A Market for Our Products May Not Develop.

Our future success will depend, in part, on the market acceptance, and the timing of such acceptance, of new products such as our OraQuick® HCV test, an OraQuick® HIV OTC test, and other new products or technologies that may be developed or acquired. To achieve market acceptance, we and/or our distributors will likely be required to undertake substantial marketing efforts and spend significant funds to inform potential customers and the public of the perceived benefits of these products. In addition, governmental funding for the purchase of our products may be needed to help create market acceptance and expand the use of our products.

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There may be limited evidence on which to evaluate the market reaction to products that may be developed and our marketing efforts for new products may not be successful. It is also possible that governmental funding may be limited for new products, such as an OraQuick® HCV test. As such, there can be no assurance that any products will obtain market acceptance and fill the market need that is perceived to exist.

If Acceptance and Adoption of Oral Fluid Testing and Collection Products Does Not Continue, Our Future Results May Suffer.

We have made significant progress in gaining acceptance of oral fluid testing products, particularly for (i) HIV testing in the public health, hospital, insurance and other markets, and (ii) drugs of abuse testing in the workplace and criminal justice markets. Our subsidiary, DNAG, has also made significant progress in gaining acceptance of oral fluid collection products that are used with genetic and other molecular testing applications. However, the degree of acceptance for these products is uncertain, and one or more markets may resist the adoption of oral fluid products as a replacement for other testing or collection methods in use today. As a result, there can be no assurance that we will be able to expand the use of our oral fluid testing products in these or other markets.

Our Customers May Resist Adoption of Rapid Point-of-Care Diagnostic Testing.

We expect sales of our rapid point-of-care diagnostic products, such as our OraQuick *ADVANCE*® HIV-1/2 and OraQuick® HCV tests, to become an increasingly important part of our business. Rapid point-of-care tests are beneficial to healthcare providers because, among other things, they can be administered by providers in their own facilities without sending samples to central laboratories and can help ensure that test results are delivered to the individuals being tested.

However, clinical reference laboratories and hospital-based laboratories currently provide the majority of diagnostic tests used by physicians and other healthcare providers in the U.S. In certain international markets such as Europe, diagnostic testing is performed primarily by centralized laboratories. Our future sales will depend, in part, on our ability to expand market acceptance of rapid point-of-care testing by physicians and other healthcare providers and successfully compete against laboratory testing methods and products. We expect that clinical reference and other hospital-based laboratories will continue to compete vigorously against our rapid point-of-care products. Even if we can demonstrate that our products are more cost effective, save time, or have better performance or other benefits, physicians and other healthcare providers may resist changing to rapid point-of-care tests and instead may choose to use competing laboratory tests. Our failure to achieve initial or additional market acceptance of our rapid point-of-care diagnostic tests with customers would have a negative effect on our future sales growth.

We Expect to Face Intense Competition From Other Providers of Diagnostic Tests and Collection Products.

Our rapid point-of-care tests compete with similar point-of-care products made by our competitors. This competition is particularly evident with respect to our OraQuick *ADVANCE*® HIV-1/2 test. In addition, the Oragene® product line sold by our subsidiary, DNAG, competes against other molecular collection products, such as blood collection kits and buccal swabs. There are a number of competitors making investments in competing technologies and products, and a number of our competitors may have a competitive advantage because of their greater financial, technical, research and other resources. Moreover, some competitors offer broader product lines, aggressively discount prices for their products and may have greater name recognition than we have. If our competitors products are more effective than ours or take market share from our products through more effective marketing or competitive pricing, our revenues, margins and operating results could be adversely affected.

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Sales of our OraSure QuickFlu Test May be Affected by Factors Beyond our Control.

In 2011, we began selling a new rapid flu test under the tradename OraSure QuickFlu , primarily in the U.S. hospital and public health markets. A number of factors that are beyond our control could affect sales of this product, including:

Variability in the timing of the onset, length and severity of the flu season, which typically occurs from November of one year to May of the following year;

Competition from other rapid flu tests in the markets we serve;

Deficiencies in the manufacture, design or performance of the product or failure by the manufacturer to meet applicable quality and regulatory standards;

The failure of our supplier for this product to obtain a CLIA waiver, which we believe is important to expand sales, particularly in the public health market;

The inability of our supplier to provide sufficient quantities of the product;

Changes in the types or strains of influenza during a particular flu season;

Lower than expected market penetration of the OraSure QuickFlu test; and

Our inexperience in selling a rapid flu test.

Our Inability to Carry Out Certain of Our Marketing and Sales Plans May Make it Difficult for Us to Grow or Maintain Our Business.

We have implemented in the past, and we intend to implement in the future, an aggressive sales and marketing plan to expand sales of our products. Specifically, we will continue to expand the impact of our direct field sales force, use third party distributors and manufacturers—sales representatives, and implement other sales and marketing programs. If we are unable to successfully implement these programs or modify these programs in response to evolving market and economic conditions, we may be unable to grow and our business could suffer.

Our Sales Cycles Can be Lengthy, and May Depend on Public Funding, Which Can Cause Variability and Unpredictability in Our Operating Results.

The sales cycles for certain of our products can be lengthy and unpredictable, which makes it more difficult to accurately forecast revenues in a given period and may cause revenues and operating results to vary from period to period. Sales of our products often involve purchasing decisions by large public and private institutions, may require many levels of approval and may be dependent on economic or political conditions and the availability of grants or funding from governmental or public health agencies which can vary from period to period in both amount and timing. For example, in past years our OraQuick *ADVANCE*® HIV-1/2 test has been purchased through bulk procurement or other funding provided by governmental agencies. There can be no assurance that purchases or funding from these agencies will occur or continue, especially if current negative economic conditions continue or intensify. As a result, we may expend considerable resources on unsuccessful sales efforts or we may not be able to complete transactions at all or on a schedule and in an amount consistent with our objectives.

We May be Sued for Product Liabilities for Injuries Resulting From the Use of Our Products.

We may be held liable if any of our products, or any product which is made with the use or incorporation of any of our technologies, causes injury of any type or is found otherwise unsuitable during product testing, manufacturing, marketing, sale or usage. There is no assurance that we would be successful in defending any product liability lawsuits brought against us. Regardless of merit or eventual outcome, product liability claims could result in:

Decreased demand for our products;

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Lost revenues;

Damage to our image or reputation;

Costs related to litigation;

Diversion of management time and attention; and

Incurrence of damages payable to plaintiffs.

We are selling cryosurgical products in the consumer or OTC market in certain countries. We may expand the OTC sales of these products to other countries and intend eventually to distribute other types of products in the domestic and international OTC markets, such as our OraQuick® HIV-1/2 test. We believe the sale of products in the OTC market increases the risk of potential product liability exposure.

The Insurance We Purchase to Cover Our Potential Business Risks May be Inadequate.

Although we believe that our present product liability and other insurance coverage is sufficient to cover our current estimated exposures, we cannot be sure that we will not incur liabilities in excess of our policy limits. In addition, although we believe that we will be able to continue to obtain adequate coverage in the future, there is no assurance that we will be able to do so at acceptable costs.

We Could Suffer Monetary Damages, Incur Substantial Costs or be Prevented From Using Technologies Important to Our Products as a Result of Legal Proceedings.

We have been and in the future may become involved in various legal proceedings arising out of our businesses. These may include commercial disputes, negligence claims or various other lawsuits arising in the ordinary course of our business, including employment matters. Such lawsuits can seek damages, sometimes in substantial amounts, for commercial or personal injuries allegedly suffered and can include claims for punitive or other special damages. An adverse ruling or rulings in one or more such lawsuits could, individually or in the aggregate, result in the termination or modification of a material contract or otherwise have a material adverse effect on our sales, operations or financial performance.

Performance of Our Products May Affect Our Revenues, Stock Price and Reputation.

Our products are generally sold with labeling that contains performance claims approved or cleared by the FDA or other regulators. However, our products may not perform as expected. For example, a defect in one of our diagnostic products or a failure by a customer to follow proper testing procedures, may cause the product to report inaccurate information such as a false positive result or a false negative result. If our products fail to perform in accordance with the applicable label claims or otherwise in accordance with the expectations or needs of our customers, customers may switch to a competing product or otherwise stop using our products, and our revenues could be adversely affected. In addition, poor performance by one or more of our products and publicity surrounding such performance could have an adverse effect on our reputation, our continuing ability to sell products and the prevailing market price of our Common Stock.

Our International Presence May Increase Our Risks and Expose Our Business to Regulatory, Cultural or Other Restraints.

We intend to increase revenue derived from international sales of our products. Our international sales accounted for \$14.2 million or 17% of total revenues in 2011, \$11.5 million or 15% of total revenues in 2010 and \$14.8 million or 19% of total revenues in 2009. In addition, in 2011 we acquired DNAG and as a result now have a direct presence in Canada.

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A number of factors could adversely affect the performance of our business and/or cause us to incur substantially increased costs because of our international presence and sales, including those set forth below:

The uncertainty of foreign laws and the potential for inconsistent imposition of legal and regulatory requirements;

Cultural and political differences that favor local competitors or make it difficult to effectively market, sell and gain acceptance of our products;

Inexperience in international markets and territories and difficulties in staffing and managing foreign operations;

Exchange rates, currency fluctuations, tariffs and other barriers, extended payment terms and dependence on and difficulties in finding and managing international distributors or representatives;

Regulatory requirements (including compliance with applicable customs regulations) and the need for reimbursement approvals;

The inability to obtain or maintain ISO certification for our or our suppliers manufacturing facilities;

Our inability to obtain or maintain regulatory approvals or registrations for our products;

Our inability to identify international distributors and negotiate acceptable terms for distribution agreements;

The loss of one or more distributors and difficulties or delays in obtaining new or transferred product registrations or approvals for use by a replacement distributor;

The creditworthiness of foreign distributors and customers and difficulty in collecting foreign accounts receivable;

Difficulty of enforcing contractual obligations or recovering damages under foreign legal systems;

Economic conditions, political instability, the absence of available funding sources, terrorism, civil unrest, war and natural disasters in foreign countries;

Our exposure to liability under the Foreign Corrupt Practices Act and various other laws, rules and/or regulations applicable to us as a result of our international sales;

Long sales cycles in international markets, especially for sales to foreign governments, quasi-governmental agencies and international public health agencies;

The sale of competing products by foreign competitors at prices at or below such competitors or our costs;

The unavailability of licenses to certain patents in force in a foreign country which cover our products; and

Reduced protection for, or enforcement of, our patents and other intellectual property rights in foreign countries. In addition, we have entered into a contract for the manufacture and supply of our OraQuick® HIV-1/2 test in Thailand, and the Histofreezer® cryosurgical product sold in international markets is currently manufactured by a third party in The Netherlands. We may enter into agreements to manufacture these or other products in additional foreign countries as well. However, economic, cultural and political conditions and foreign regulatory requirements may slow or prevent the manufacture of our products in countries other than the United States. Interruption of the supply of our products could reduce revenues or cause us to incur significant additional expenses in finding an alternative source of supply. Foreign currency fluctuations and economic conditions in foreign countries could also increase the costs of manufacturing our products in foreign countries.

## Risks Relating to the Economy, Our Financial Results, Investments, Credit Facilities and Need for Financing

Continued Economic Volatility and Disruption Could Adversely Affect Our Results of Operations, Cash Flow and Financial Condition or Those of Our Customers and Suppliers.

The recent global credit and financial crisis could have a significant adverse effect on our operations. Current volatile economic conditions may continue for the foreseeable future and intensify, and have adversely affected and could continue to adversely affect our financial performance and condition or those of our customers and suppliers. These circumstances could adversely affect our access to liquidity needed to conduct or expand our business or conduct future acquisitions or make other discretionary investments. Many of our customers rely on public funding provided by federal, state and local governments, and this funding has been and may continue to be reduced or deferred as a result of current economic conditions. These circumstances may adversely impact our customers and suppliers, which, in turn, could adversely affect their ability to purchase our products or supply us with necessary equipment, raw materials or components.

We Have a History of Losses and May Not Be Able to Achieve Sustained Profitability.

We have experienced annual net losses since 2008. In addition, as of December 31, 2011, the Company had an accumulated deficit of \$147.4 million. Even though we achieved profitability several years ago, there can be no assurance that we will be able to achieve or sustain profitability in the future.

Our ability to achieve and sustain profitability in the future will be dependent upon a number of factors including, without limitation, the following:

Creating market acceptance for and selling increasing volumes of our OraQuick *ADVANCE*® HIV-1/2 test and our OraQuick® HCV test in the United States and internationally;

The level of expenditures we are required to make in order to develop, obtain regulatory approvals for and successfully commercialize our new products;

Our ability to successfully launch new products after receipt of required regulatory approvals or the acquisition of rights to those products:

The success and revenue growth of our new subsidiary, DNAG, and the sales of its Oragene® product line;

The degree to which certain of our new products may replace sales of our existing products and the financial impact of that change, including the degree to which our OraQuick *ADVANCE*® HIV-1/2 test will replace our OraSure® collection device for HIV-1 testing or sales of our cryosurgical wart removal products in OTC markets will replace sales of our Histofreezer® product to physicians offices or other professional markets;

The degree to which our major distributors comply with their contractual obligations, including minimum purchase commitments;

Whether we are successful in obtaining and maintaining required regulatory approvals and registrations for our new products;

Changes in the level of competition, such as would occur if larger and financially stronger competitors introduced new or lower priced products to compete with our products;

Changes in economic conditions in domestic or international markets, such as economic downturns, reduced demand, inflation and currency fluctuations;

Failure to achieve our targets for growth in revenues;

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Changes in distributor buying patterns or a buildup of significant quantities in our distributors inventories or distribution channels; and

The costs and results of patent infringement and other litigation or claims asserted against us. We May Experience Fluctuations in Our Financial Results or Fail to Meet Our Financial Projections.

Our operating results can fluctuate from quarter to quarter and year to year, which could cause our growth or financial performance to fall below the expectations of investors and securities analysts. Our financial projections for future periods are based on a number of assumptions, including estimated demand for our products. However, sales to our distributors and other customers may fall short of expectations because of less than estimated customer demand or other factors, including continued volatility and disruption in economic conditions, reduced governmental funding and other circumstances described elsewhere in this Annual Report. Infrequent, unusual or unexpected changes in revenues or costs could also contribute to the variability of our financial results. In addition, our products provide different contributions to our gross margin and our operating results could also fluctuate and be affected by the mix of products sold and the relative prices and gross margin contribution of those products. Failure to achieve operating results consistent with the expectations of investors and securities analysts could adversely affect our reputation and the price of our Common Stock.

Our Estimates or Judgments Relating to Critical Accounting Policies Are Based on Assumptions That Can Change or Prove to be Incorrect.

Our discussion and analysis of financial condition and results of operations is based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, we evaluate significant estimates used in preparing our financial statements, including those related to:

Revenue recognition;
Allowance for uncollectible accounts receivable;
Reserve for inventory write-downs;
Stock-based compensation;
Potential impairment of long-lived and intangible assets including goodwill;
Clinical trial accruals; and

Contingencies.

We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in our discussion and analysis of financial condition and results of operations, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these and other estimates if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our operating results to fall below the expectations of securities analysts and investors, resulting in a decline in our stock price.

Changes in Foreign Currency Exchange Rates Could Negatively Affect Our Operating Results.

Our financial statements are stated in U.S. Dollars and, historically, most of our international sales have also been denominated in U.S. Dollars. As a result, in the past our exposure to foreign currency exchange rate risk has not been material. However, in August 2011 we acquired DNAG, a Canadian company. DNAG s revenues and

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operating results are recorded in Canadian Dollars and certain of its international sales are denominated in local currencies, including the Euro, British Pound and Australian Dollar. Our expectation is that the DNAG business will continue to grow and our exposure to foreign currency exchange rates may be more significant than in past years.

Exchange rate fluctuations may affect DNAG s revenues and expenses and the translation of DNAG s financial results into U.S. Dollars. Unfavorable currency exchange rate fluctuations could negatively affect our consolidated financial statements including our balance sheet, revenues and results of operations. In the past, we have not generally entered into hedging instruments to manage our currency exchange rate risk, but we may need to do so in the future. However, our attempts to hedge against these risks may not be successful. If we are unable to successfully hedge against unfavorable foreign currency exchange rate movements, our consolidated financial results may be adversely impacted.

Our Credit Facilities Contain Certain Financial Covenants Which, if Not Satisfied, Could Result in the Acceleration of the Amounts Due Under These Facilities and Limit Our Ability to Borrow in the Future.

Our credit facility with Comerica Bank contains various financial and other covenants with which we must comply on an ongoing or periodic basis. If we enter into new or additional credit facilities or loan agreements, we would expect those arrangements would contain similar types of covenants. Although we do not expect to violate these covenants and obligations, if such a violation were to occur, the outstanding debt under our credit facility or other arrangement could become immediately due and payable, our lender could proceed against any collateral securing such indebtedness and our ability to borrow additional funds in the future may be adversely affected.

We May Require Future Additional Capital.

Our future liquidity and ability to meet our future capital requirements will depend on numerous factors, including, but not limited to, the following:

The costs and timing of expansion of sales and marketing activities;

The timing and success of the commercial launch of new products;

The extent to which we gain or expand market acceptance for existing, new or enhanced products;

The costs and timing of the expansion of our manufacturing capacity;

The success of our research and product development efforts;

The time, cost and degree of success of conducting clinical trials and obtaining regulatory approvals;

The magnitude of capital expenditures;

Changes in existing and potential relationships with distributors and other business partners;

The costs involved in obtaining and enforcing patents, proprietary rights and necessary licenses;

The costs and liability associated with patent infringement or other types of litigation;

Competing technological and market developments; and

The scope and timing of strategic acquisitions.

If additional financing is needed, we may seek to raise funds through the sale of equity or other securities or through bank borrowings. There can be no assurance that financing through the sale of securities, bank borrowings or otherwise, will be available to us on satisfactory terms, or at all.

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Terrorist Attacks or National Disasters May Adversely Affect Our Business.

Terrorist attacks or natural disasters, and subsequent governmental responses to these events, could cause economic instability. These actions could adversely affect economic conditions both within and outside the United States and reduce demand for our products. These events could disrupt the operations of our customers and suppliers and eliminate, reduce or delay our customers ability to purchase and use our products and our suppliers ability to provide raw materials and finished products.

Our manufacturing facilities are located in Bethlehem, Pennsylvania. Although we have business interruption insurance, our facilities, including some pieces of manufacturing equipment and our computer systems, may be difficult to replace and could require substantial replacement lead-time. Various types of disasters, including earthquakes, fires, floods and acts of terrorism, may affect our manufacturing facilities and computer systems. In the event our existing manufacturing facilities or computer systems are affected by man-made or natural disasters, we may have difficulty operating our business and may be unable to manufacture products for sale or meet customer demands or sales projections. If our manufacturing operations were curtailed or ceased, it would seriously harm our business.

#### Risks Relating to Our Common Stock

Our Stock Price Could Continue to be Volatile.

Our stock price has been volatile, has fluctuated substantially in the past, may be volatile in the future and could experience substantial declines. The following factors, among others, could have a significant impact on the market for our Common Stock:

Future announcements concerning us, our products, our competitors or our industry;

Clinical results with respect to our products or those of our competitors;

Status of clinical studies and pending submissions for required regulatory approvals;

The gain or loss of significant contracts and availability of funding for the purchase of our products;

Delays in the development, regulatory approval or commercialization of new or enhanced products;

Legislative developments;

Disputes or developments with key customers, distributors or suppliers;

Developments in patent or other proprietary rights;

Litigation or threatened litigation;

Failure to achieve, or changes in, financial estimates by securities analysts and comments or opinions about us by securities analysts or major stockholders;

Governmental regulation;
Changes in the level of competition;
Loss of or declines in sales to major distributors or customers or changes in the mix of products sold;
The relatively low trading volume for our Common Stock;
Period to period fluctuations in our operating results;
Additions or departures of key personnel;
General market and economic conditions; and

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Terrorist attacks, civil unrest, war and national disasters.

In addition, the stock market in general has experienced extreme price and volume fluctuations that have affected the market price of our Common Stock, as well as the stock of many companies in the diagnostics and life sciences industries. Often, price fluctuations are unrelated to operating performance of the specific companies whose stock is affected.

In the past, following periods of volatility in the market price of a company s stock, securities class action litigation has occurred against the issuing company. If we were subject to this type of litigation in the future, we could incur substantial costs and a diversion of our management s attention and resources, each of which could have a material adverse effect on our revenue and earnings. Any adverse determination in this type of litigation could also subject us to significant liabilities.

Future Sales of Our Common Stock by Existing Stockholders, Executive Officers or Directors Could Depress the Market Price of Our Common Stock and Make It More Difficult For Us to Sell Stock in the Future.

Sales of our Common Stock in the public market, or the perception that such sales may occur, could negatively impact the market price of our Common Stock. We are unable to estimate the number of shares of our Common Stock that may actually be resold in the public market since this will depend on the market price for our Common Stock, the individual circumstances of the sellers and other factors.

We have a number of institutional stockholders that own significant blocks of our Common Stock. If one or more of these stockholders sell large portions of their holdings in a relatively short time, for liquidity or other reasons, the prevailing market price of our Common Stock could be negatively affected. In addition, it is possible that one or more of our executive officers or non-employee members of our Board of Directors could sell shares of our Common Stock during an open trading window or pursuant to a 10b5-1 sales plan under our Insider Trading Policy. These transactions and the perceived reasons for these transactions could have a negative effect on the prevailing market price of our Common Stock.

Investor Confidence and Share Value May be Adversely Impacted if We and/or Our Independent Registered Public Accounting Firm Conclude That Our Internal Control Over Financial Reporting is Not Effective.

As directed by Section 404 of the Sarbanes-Oxley Act of 2002, the SEC adopted rules requiring us, as a public company, to include a report in our Annual Reports on Form 10-K that contains an assessment by management of the effectiveness of our internal control over financial reporting. In addition, our independent registered public accounting firm must report on the effectiveness of these internal controls.

We expect that our internal controls will continue to evolve as our business activities change. Although we seek to diligently and vigorously review our internal control over financial reporting in an effort to ensure compliance with the Section 404 requirements, any control system, regardless of how well designed, operated and evaluated, can provide only reasonable, not absolute, assurance that its objectives will be met. In addition, the overall quality of our internal controls may be affected by the internal control over financial reporting implemented by any business we acquire, such as DNAG, and our ability to assess and successfully integrate the internal controls of any such business.

If, during any year, our independent registered public accounting firm is not satisfied with our internal control over financial reporting or the level at which our controls are documented, designed, operated, tested or assessed, or if the independent registered public accounting firm interprets the requirements, rules or regulations differently than we do, then it may issue a report that is qualified. We also could conclude that our internal control over financial reporting is not effective. These events could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our financial statements and effectiveness of our internal controls, which ultimately could negatively impact the market price of our Common Stock.

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Because We Do Not Intend to Pay Cash Dividends on Our Common Stock, an Investor in Our Common Stock Will Benefit Only if it Appreciates in Value.

We currently intend to retain our current earnings and future earnings, if any, to finance the expansion of our business and do not expect to pay any cash dividends on our Common Stock in the foreseeable future. As a result, the success of an investment in our Common Stock will depend entirely upon any future appreciation. There is no guarantee that our Common Stock will appreciate in value or even maintain the price at which investors purchased their shares.

Certain Provisions in Our Certificate of Incorporation and Bylaws and Under Delaware Law Could Make a Third-Party Acquisition of Us Difficult.

Our Certificate of Incorporation and Bylaws contain provisions that could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our stockholders. We are also subject to certain provisions of Delaware law that could delay, deter or prevent a change in control of us. These provisions could limit the price investors might be willing to pay in the future for shares of our Common Stock.

Future Sales of Shares of Our Common Stock Could Adversely Affect the Trading Price of Our Common Stock and Our Ability to Raise Funds in New Equity Offerings.

Future sales of a substantial number of our shares of Common Stock or equity-related securities in the public market or privately, or the perception that such sales may occur, could adversely affect prevailing trading prices of our Common Stock, and could impair our ability to raise capital through future offerings of equity or equity-related securities. No prediction can be made as to the effect, if any, that future sales of shares of Common Stock or the availability of shares of Common Stock for future sale will have on the trading price of our Common Stock.

## ITEM 1B. Unresolved Staff Comments.

Not Applicable.

## ITEM 2. Properties.

We own a 48,000 square foot facility which is our primary corporate office and manufacturing facility, a 31,700 square foot facility that houses our sales and marketing, research and development, human resources, and regulatory and quality offices, and a 33,500 square foot facility which is used for manufacturing activities. Each of these facilities is located in Bethlehem, Pennsylvania, and is subject to a mortgage in favor of Comerica Bank. We also rent additional warehouse space on an as-needed basis. In addition, our subsidiary, DNAG, leases a 23,500 square foot facility in Ottawa, Canada, which is used as its primary corporate office and houses sales and marketing, research and development, and regulatory and quality operations.

We believe that the facilities described above are adequate for our current requirements.

## ITEM 3. Legal Proceedings.

Cryosurgical Patent Infringement Litigation

In December 2009, we filed legal proceedings in the Patents Court of the High Court of England and Wales against D.D.D. Limited, DioMed Developments Limited and Sixtem Life Srl, alleging that the import and/or sale of the Bazuka Sub-Zero OTC cryosurgical product by the defendants in the United Kingdom infringes our European Patent (UK) 0 608 954. We are seeking injunctive relief and damages, among other remedies, in this matter. The defendants have filed a response denying infringement and alleging that our patent is invalid.

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Since the filing of these proceedings, the parties have engaged in discovery and participated in mediation. A trial in this matter is expected to occur in late April 2012.

ITEM 4. Mine Safety Disclosures.

Not Applicable.

#### PART II

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

Our Common Stock is listed for trading on the Global Select Market tier of The Nasdaq Stock Market LLC ( NASDAQ ) under the symbol OSUR. High and low sales prices reported by NASDAQ during the periods indicated are shown below.

		Year ended December 31,			
	2	2011		2010	
	High	Low	High	Low	
First Quarter	\$ 7.87	\$ 5.81	\$ 6.09	\$ 4.75	
Second Quarter	9.00	7.06	6.80	4.15	
Third Quarter	10.10	6.29	5.09	3.18	
Fourth Quarter	9.96	7.52	6.15	3.79	

On March 9, 2012, there were 494 holders of record and approximately 9,200 holders in street name of our Common Stock, and the closing price of our Common Stock was \$9.48 per share.

## **Dividends**

We have never paid any cash dividends and our Board of Directors does not anticipate paying cash dividends in the foreseeable future. We are generally not permitted to pay dividends or make other distributions to our stockholders under the terms of our credit facilities with Comerica Bank, without first obtaining Comerica s consent. We intend to retain any future earnings to provide funds for the operation and expansion of our business.