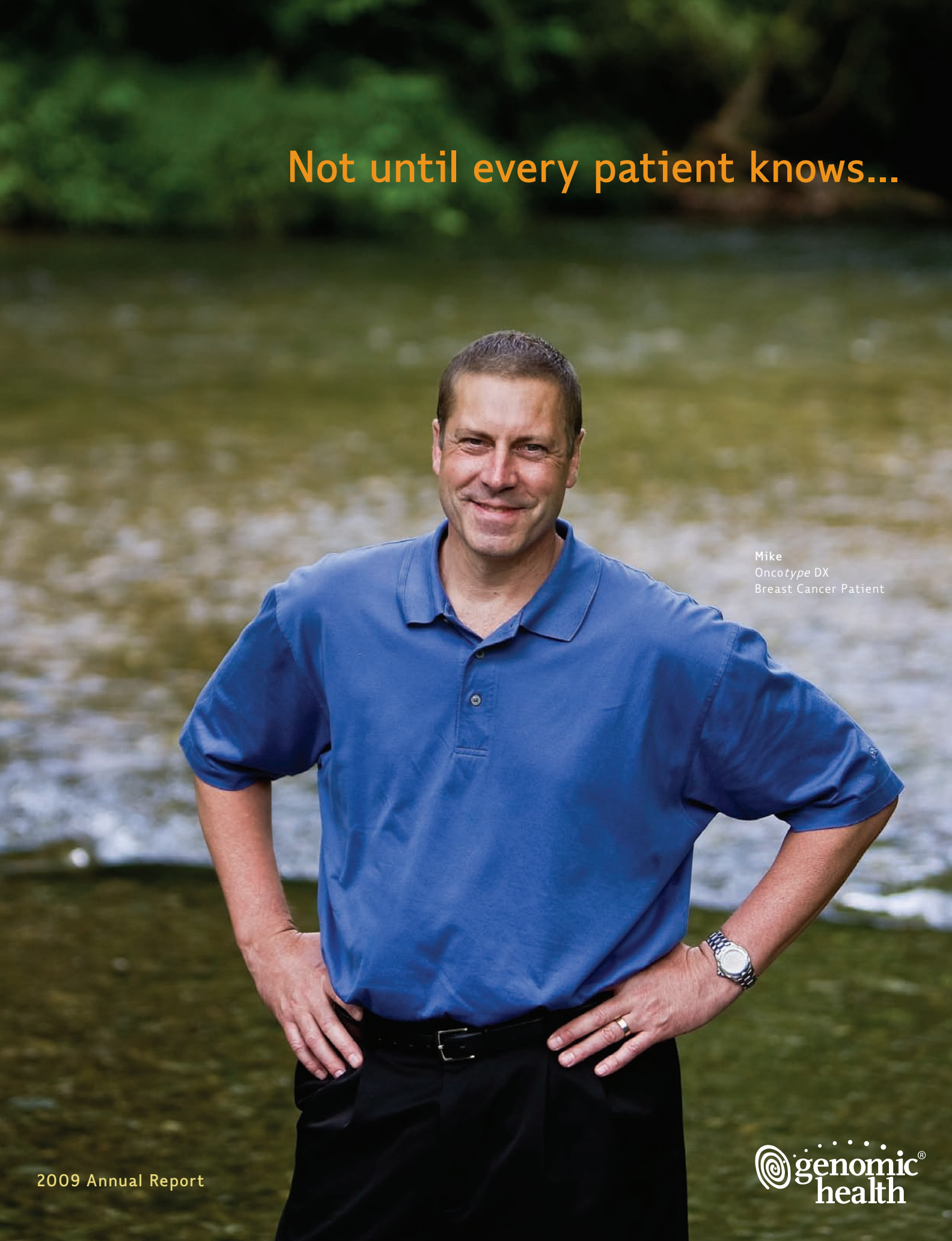
Not until every patient knows...



Mike
Onco*type* DX
Breast Cancer Patient

2009 Annual Report

genomic health®

Not until every patient knows will we have succeeded in our goal to ensure that all eligible cancer patients have access to our tests, and that each physician understands the vital role of Onco*type* DX in individualizing cancer treatment decisions. These five words inspire us in all areas of our business to forge ahead in harnessing the full potential of personalized medicine. While we are proud that well over 135,000 patients from around the world have already benefitted from our breast cancer testing services, our work will not be finished until every patient knows.

Reaching More Patients

"After my surgery for early-stage breast cancer, I faced an agonizing choice: undergo chemotherapy with its possible serious side effects, or skip it altogether and risk a recurrence of my disease. But as one of the first patients in Canada to get the Onco*type* DX test, I was able to benefit from the additional information it provided when making my treatment decision. I was ecstatic when I received a low Recurrence Score because it allowed my doctor and me to rule out chemotherapy, and I could then focus on getting better, raising my three girls, and returning to work as a flight attendant."

Coree
Onco*type* DX
Breast Cancer Patient*

Fueling Our Future

"From the very beginning, we have been committed to investing a significant amount of our revenue to fuel our pipeline. With the success of our profitable breast cancer franchise, we have the essential resources to develop new diagnostics for different types of cancer, and broaden the benefit we bring to patients around the world. This has required unwavering financial discipline, in order to power the company's growth while delivering value to the patients, who depend on our services, and to our stockholders, who have made an investment in our business."

Dean Schorno,
Senior Vice President,
Finance,
Genomic Health

"Applying information technology bioinformatics, and biostatistics technologies to the life sciences so that we can better design, analyze, and interpret genomic studies is essential to our business. Over the last few years we have seen unprecedented growth in these fields, as advanced scientific methods rapidly improve our ability to identify promising gene candidates and develop predictive models. With this enhanced understanding of molecular pathways and gene expression we can marry technology to the biology of cancer to develop sophisticated diagnostics."

Drew Watson, Ph.D.
Vice President,
Biostatistics
Genomic Health

"Our highly specialized sales team of 98 experienced professionals interacts directly with oncologists, surgeons, pathologists, and other healthcare providers to deliver pioneering genomic testing services that are changing the standard of care in cancer treatment planning. In addition to education, we work closely with physicians and their staffs to facilitate testing, providing prompt and reliable customer support and patient assistance services every step of the way. We believe this approach sets us apart from others within the diagnostics industry and has enabled us to bring personalized medicine to more than 135,000 patients to date while achieving continued commercial growth for the company year after year."

Laura Beggrow,
Vice President,
U.S. Sales,
Genomic Health

Transforming the Economics of Healthcare

"Our unique ability to build a bridge between our scientific team and the physicians who are treating patients every day allows us to develop products that meet the most significant clinical needs. We take a rigorous development approach in our analytical and clinical validation by conducting multiple, peer-reviewed clinical studies, in order to create innovative diagnostics that have the potential to transform treatment paradigms, with a lasting and meaningful impact for patients."

Mark Lee, M.D., Ph.D.
Senior Director,
Oncology Development,
Genomic Health

"Limited healthcare dollars demand that we evolve beyond treating cancer patients with a 'one-size-fits-all' approach, which is both resource-intensive and often fails many patients by not treating their disease effectively. With the introduction of genomic diagnostics, we now have more advanced tools such as Onco*type* DX to guide patients and physicians in making better treatment decisions and achieving better results. Genomic Health has set a high standard for scientific rigor in the development of their tests and is a model for other researchers and companies in this space. As an advocate, it is exciting and rewarding to be at the forefront of this new era for patients. But we must work to ensure that there is a regulatory and reimbursement climate that fosters the advancement of personalized medicine so that all cancer patients can share the potential benefits of increased quality-of-life and improved outcomes, while saving our healthcare resources."

Bob Erwin
President,
Marti Nelson
Cancer Foundation

"The future sustainability of our healthcare system requires a collaborative approach among physicians, payors, and companies to develop treatment pathways that incentivize our system to deliver optimal patient care while reducing costs. At UPMC, we've incorporated Onco*type* DX in our treatment pathway for early-stage hormone receptor positive breast cancer, because it can help identify which patients are most likely to benefit from chemotherapy and which patients can safely omit it from their treatment plan. Understanding that upfront not only improves patient care, but it also helps us utilize our healthcare dollars in a very cost-effective and clinically meaningful way."

Stan Marks, M.D.
UPMC Cancer Centers


Kimberly J. Popovits

Dear Stockholders,

2009 was a year of notable progress for Genomic Health. Our success in driving continued revenue growth from our flagship Onco*type* DX® breast cancer test led to the achievement of our goal of becoming a self-sustaining business. In addition to this important accomplishment, in January 2010 we celebrated another key milestone with the launch of our second product franchise, the Onco*type* DX colon cancer test. We believe both events reflect our proven leadership in pioneering a new business model. We have successfully combined proprietary and innovative clinical development with a patient-centric and value-based approach to deliver powerful new genomic tools for the individualization of cancer treatment.

These accomplishments are all the more significant given current challenges facing the United States healthcare system – chief among them, soaring costs and troubling inefficiencies. With average efficacy rates of cancer therapeutics hovering around just 25 percent, and cancer treatment costs estimated to reach $80 billion by 2012, we are fast approaching $60 billion in wasteful spending. Furthermore, this estimate does not take into account quality-of-life issues facing the vast numbers of cancer patients who suffer from the side effects of their treatments. Clearly, an approach of "one-size-fits-all" medicine is inefficient, ineffective, and ultimately unsustainable.

We can and must do better. Over the past year, Genomic Health generated new evidence showing that Onco*type* DX is transforming the treatment paradigm for early-stage breast cancer, while delivering significant value to the healthcare system. To date, six independent studies have shown that treatment decisions change approximately 30 percent of the time when the Onco*type* DX Recurrence Score® is incorporated to individualize patient treatment planning. The impact of this trend has led to a decline in chemotherapy use in node-negative breast cancer, and importantly, is saving our healthcare system additional costs associated with chemotherapy treatment.

We believe these results demonstrate we can deliver the promised value of personalized medicine to clinical practice and reflect Genomic Health's commitment to leading the development and delivery of actionable genomic information to physicians, patients and payors.

Living Up to Our Commitment

Our 2009 results are evidence that Onco*type* DX is becoming standard practice in helping physicians and patients make more informed treatment decisions. With more than 135,000 Recurrence Score results delivered to breast cancer patients since its availability in 2004, Onco*type* DX is an industry-leading tool for reliably identifying those early-stage breast cancer patients who are likely to benefit from chemotherapy from those who likely will not.

With total revenues for 2009 growing 35 percent to $149.6 million, compared with 2008, we became a self-sustaining business, and cash from operations turned positive. At the same time, we were able to reduce our full-year net loss by 42 percent to $9.4 million, from $16.1 million in 2008. We also reported year-end cash and cash equivalents and investments of $57.4 million. We believe these strong financial results reinforce our continued investment in the future and support our goal of moving Genomic Health to profitability in 2010.

We continue to drive product growth by demonstrating the increasing value of the Onco*type* DX breast cancer test. In the six years since its introduction, we have invested in multiple clinical trials involving more than 4,000 patients that have expanded our test's clinical utility. To date, these studies have supported the use of the test in assessing recurrence in node-negative patients, chemotherapy benefit for both node-negative and node-positive patients, and hormone receptor and HER2 status. In addition, in May 2009 we presented data supporting the use of Onco*type* DX in men with breast cancer. This was the largest genomic study to compare gene expression in male patients, and its results showed that breast cancers in men display very similar gene signatures to those in women.

As we further expand the clinical utility of Onco*type* DX for breast cancer patients, we are working with payors to expand reimbursement coverage to include all patient populations who can benefit from the test. We have secured coverage agreements, policies or contracts for more than 90 percent of U.S. insured lives for patients with node-negative breast cancer, and are now focusing our efforts to establish similar coverage for additional uses of Onco*type* DX. With the inclusion of node-positive patients, we believe there is an addressable population of approximately 100,000 patients in the U.S. each year that could benefit from the information provided by the Recurrence Score. We are also pleased to report that we are conducting a large clinical study in patients with pre-invasive disease, or ductal carcinoma in situ (DCIS), to guide the selection of treatment based on the biology of that disease. By answering this important clinical question, the potential addressable breast cancer population grows to 145,000 patients each year in the U.S. alone.

Expanding Patient Access Internationally

As the Onco*type* DX breast cancer test gains recognition as standard of care in the U.S., the opportunity for us to deliver its benefits to patients around the world continues to grow. Accordingly, we have increased our resource commitment to the diversification and development of our international business, which we believe represents an opportunity to reach roughly two-fold the number of U.S. patients.

As a result, we have seen strong growth from our international business over the past two years. At the end of 2009, international tests accounted for eight percent of total test volume, consisting of samples from more than 50 countries. We also increased the number of distributors of our tests to 12, including recent agreements in Brazil, Venezuela, Spain and Portugal. Believing that our international success must follow the same pathway pioneered in the U.S., we continued to focus our efforts on country-specific clinical studies aimed at securing reimbursement for Onco*type* DX from national healthcare systems, which we expect will drive adoption rates. We are pleased with our growing momentum in international markets to date and look forward to building on this progress in the coming year.

Becoming a Multi-Product Company

In January 2010, we launched our second product franchise, the Onco*type* DX colon cancer test – the first multi-gene test for independently predicting recurrence risk in patients with stage II colon cancer based on a quantitative assessment of an individual's tumor. Affecting about 30,000 patients in the U.S. and four to five times as many people worldwide, stage II colon cancer is similar to early-stage breast cancer in that only a small percentage of patients benefit from chemotherapy. Current treatment selection is based on assessment of recurrence risk; however, until now, a precise tool for quantifying that risk has not been available.

Our Onco*type* DX colon cancer test is supported by a rigorous and ongoing clinical development program, including the landmark QUASAR validation study which independently evaluated the multi-gene test in more than 1,400 stage II colon cancer patients. In addition, we plan to initiate a second stage II colon cancer recurrence study in 2010, as well as additional studies in the future focused on stage III patients and drug selection.

Looking beyond breast and colon cancers, we have a rich pipeline aimed at optimizing treatment decisions in a range of different cancers. In our collaboration with Pfizer focused on renal cancer, we have completed our first gene identification study and plan to report the results later this year. We also are advancing our program in prostate cancer, a disease in which a large number of patients are identified through widespread screening, but few benefit from aggressive treatment. We have initiated a gene identification study aimed at discovering the genes that can predict clinical outcome and expect to report results in 2010. In addition, we recently developed a new method for whole genome expression analysis using standard tumor specimens that are routinely collected in clinical practice, which may accelerate clinical discovery and validation of advanced diagnostics for many different types of cancer.

While we continue to address challenges inherent to our business, including regulatory and reimbursement risks, we believe that with the success of our Onco*type* DX platform, we are well-positioned to lead the healthcare discussion to a focus on the proven value of personalized medicine. Each day we are driven by our mission to develop and deliver high-value genomic information to physicians, patients and payors that transforms medical practice and the economics of cancer treatment. ***Not Until Every Patient Knows*** will we have achieved this important goal.

We thank our dedicated employees for their passion in placing patients at the center of our work, and we thank you, our stockholders, for your investment in our future.

Kimberly J. Popovits
President and Chief Executive Officer

Corporate Directory

MANAGEMENT TEAM

Randal W. Scott, Ph.D.
Executive Chairman of the Board

Kimberly J. Popovits
President & Chief Executive Officer

G. Bradley Cole
Chief Operating Officer &
Chief Financial Officer

Joffre B. Baker, Ph.D.
Chief Scientific Officer

Steven Shak, M.D.
Chief Medical Officer

Paul Aldridge, Ph.D.
Chief Information Officer

David Logan
Executive Vice President
Worldwide Commercialization

Kathy Hibbs
Senior Vice President &
General Counsel

Laura Leber
Senior Vice President
Corporate Communications

Dean Schorno
Senior Vice President
Finance

Tricia Tomlinson
Senior Vice President
Human Resources

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Former President and CEO
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Randall S. Livingston
Vice President for Business Affairs
& Chief Financial Officer
Stanford University

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Myers Ventures LLC

Kimberly J. Popovits
President & Chief Executive Officer
Genomic Health

Randal W. Scott, Ph.D.
Executive Chairman of the Board
Genomic Health

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Genomic Health, Inc.
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Redwood City, CA 94063

TRANSFER AGENT

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1-800-962-4284
http://www.computershare.com

LEGAL COUNSEL

Pillsbury Winthrop Shaw Pittman LLP

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Ernst & Young LLP

ANNUAL MEETING OF STOCKHOLDERS

The Annual Meeting of Stockholders will be held on June 10, 2010 at 10:00 a.m. Pacific Time at:

Seaport Center
459 Seaport Court
Redwood City, CA 94063

STOCK LISTING

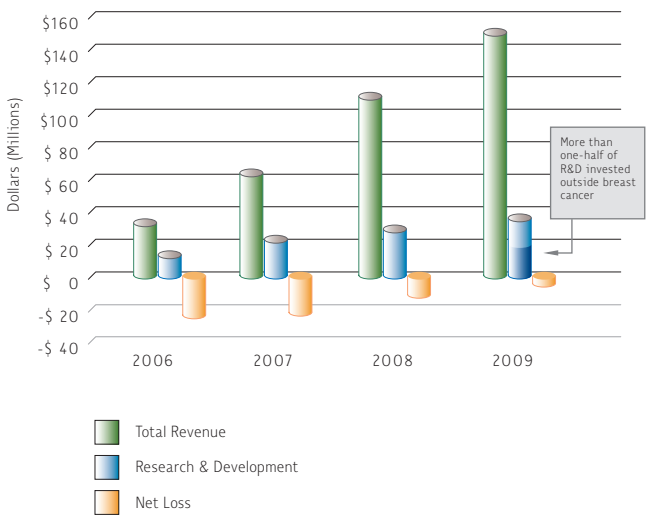
Nasdaq: GHDX

This Annual Report to Stockholders contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which statements can be identified by words such as "believes," "anticipates," "plans," "expects," "will," "can," "intends" and similar expressions. These forward-looking statements include the reasons for and factors supporting growth in usage of our tests; our belief that Onco*type* DX is becoming standard practice in clinical decision making; the impact our tests may have on patients, payors or the healthcare system; our product pipeline and our ability to leverage our previous investments and to generate new tests; our ability to develop new tests and the proposed timing of potential future product launches; our intent to continue to pursue research and development and clinical studies in additional patient populations and types of cancer; the success of clinical trials or timing of clinical results; the applicability of clinical study results to actual outcomes; our belief that clinical validation data supporting our tests is a key competitive advantage; our belief that using our tests allow for more informed treatment decisions; our ability to individualize patient care and the results obtained by and outcomes of individual patients; our belief that our financial results reinforce our continued investment in our business and support our goal of moving to profitability in 2010; our beliefs regarding the success of our business model and the benefits it provides; our beliefs with respect to our international expansion and drivers of our success outside the U.S.; our beliefs regarding market sizes and opportunities; and our plans to continue to pursue reimbursement for our tests.

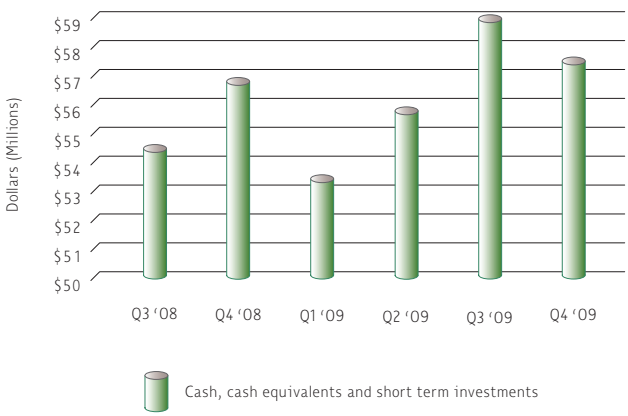
Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially. These risks and uncertainties include, but are not limited to: our ability to increase usage of our tests or future tests; the risk that we may not obtain or maintain sufficient levels of reimbursement for our existing tests and any future tests we may develop; the risk that reimbursement pricing may change; the risks and uncertainties associated with the regulation of our tests by FDA; the impact of new legislation or regulation on our business; our ability to compete against third parties; our ability to develop and commercialize new tests; unanticipated costs or delays in research and development efforts; our ability to obtain capital when needed; our history of operating losses; the results of clinical studies; the applicability of clinical results to actual outcomes, and the other risks set forth in our filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2009. These forward-looking statements speak only as of the date hereof. Genomic Health disclaims any obligation to update these forward-looking statements.

*The stories of the patients featured in this Report are their own, are not intended to be representative of patients with breast cancer generally, and should not be considered medical advice. Patients should consult their doctor to determine the best treatment decision for their individual disease. As of the date of this Report, substantially all of our existing reimbursement coverage is for patients with N-, ER+ breast cancer. We may not be able to obtain significant levels of reimbursement for breast cancer patients with N+, ER+ disease.

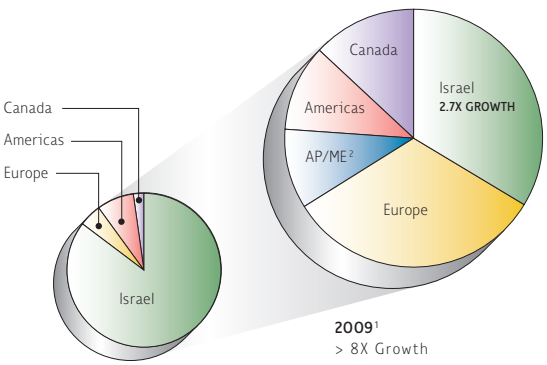
Breast Cancer Franchise Turned Profitable in 2009



Genomic Health Became Cash Flow Positive in 2009

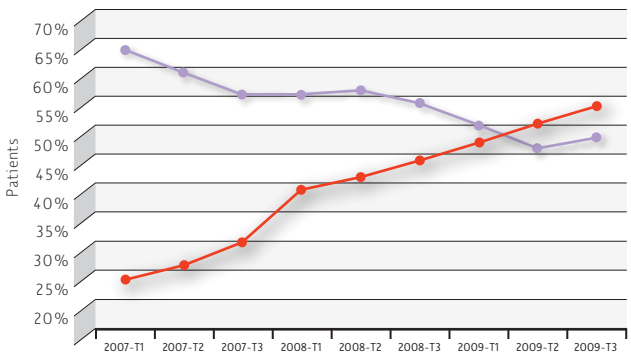


International Business Growth



[1] Tests delivered
[2] AP/ME= Asia Pacific Middle East

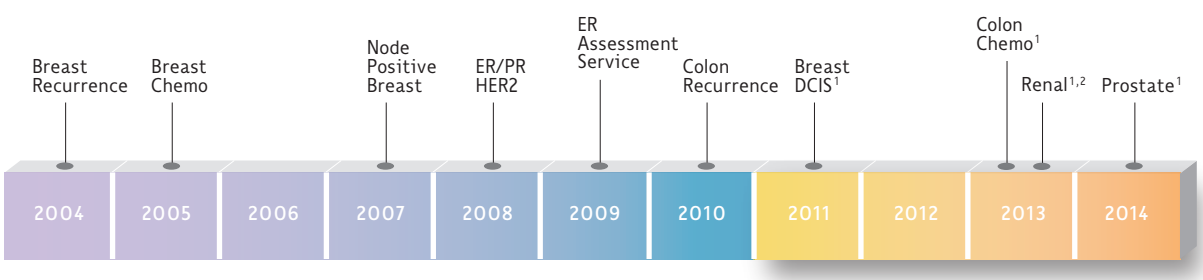
Oncotype DX Penetration / Chemotherapy Usage[1]



T= Trimester

[1] Adjuvant Data is from OncoReport ICI T2 2009. Date on File, Genomic Health 2009

Multiple Product Franchises on the Horizon



[1] estimated
[2] Pfizer dependent

genomic health®

"Getting a diagnosis of early-stage breast cancer as a healthy 48 year old man came as a complete shock. Following my surgery to remove the tumor I began treatment with chemotherapy because there is a strong history of cancer in my family and I also had one lymph node where cancer cells were found. Unfortunately, one week after my first round of chemo, I became so ill that I was hospitalized in the ICU and was unable to tolerate any more treatments. That's when my doctor decided to run the Onco*type* DX test on my tumor, to see if we could safely stop the chemo. When my Recurrence Score result came back as a 3, my wife and I were elated because we knew that hormone treatment alone would bring me the most benefit."

Mike
Onco*type* DX
Breast Cancer Patient*

Learn more about:
Our company
www.GenomicHealth.com

Our personalized, genomic tests
www.Onco*type*Dx.com

Information for newly diagnosed
breast cancer patients
www.MyTreatmentDecision.com and
www.BreastCancerTreatmentCoach.com

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