Personalized Medicine
“Disruptive Technology?”

David Logan
Senior Vice President, Commercial
Genomic Health Inc
Safe Harbor Statement

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements related to future periods, can be identified by words such as “believes,” “anticipates,” “plans,” “expects,” “will,” “intends” and similar expressions, and may include our future plans and prospects and our product pipeline. Forward-looking statements are subject to risks and uncertainties which may cause actual results to differ materially. For a discussion of the factors that may cause our results to differ, please refer to our filings with the Securities and Exchange Commission, including our [Annual Report on Form 10-K for the year ended December 31, 2008] [Quarterly Report on Form 10-Q for the quarter ended March 31, 2009]. These forward-looking statements speak only as of the date hereof. Genomic Health disclaims any obligation to update these forward-looking statements.
What is Personalized Medicine?

“Personalized medicine
…is when disease happens to you!”
Focused on Fundamentals…Proving the Value of Personalized Medicine

Leader in genomic analysis of tumor biopsies

Turn Value into Profit

Improve the quality of treatment decisions for patients with cancer
Personalized Medicine Moves to Center of Global Healthcare Solution

“We spend far more on treating illnesses that could have been managed for far less.”

– President Barack Obama
Sequencing the Genome was Just the Beginning of an Information Wave…
Genomics today is tracking like the computer industry in the 1970s -- at the beginning of a consumer revolution...

Moore’s Law
Technology is miniaturizing -- cost per gene analyzed is down and increasing information is available

Metcalfe’s Law
The utility of genomic information is accelerating as researchers, patients and physicians begin to network

Finite Biology
Number of genes involved in disease are finite… and the time required to fit the pieces into a finite puzzle is decreasing rapidly

= Personalized Medicine
The Oncotype DX® Breast Cancer Assay Addresses Critical Clinical Question for Non-Metastatic Patients

- Chemotherapy benefit is modest in the adjuvant setting (~4%)*

- Oncotype DX®
  - predicts the likelihood of breast cancer recurrence in women with newly diagnosed, early stage invasive breast cancer
  - assesses the likely benefit from both hormonal therapy and chemotherapy

- Independent studies verify that Oncotype DX® use impacts treatment decisions

- Genomic information is shifting the treatment paradigm for breast cancer…

*Lancet 1996 Apr 20;347(9008):1066-71
The Onco
type DX® Recurrence Score is a Continuous Predictor of Recurrence Risk

What is the 10-year probability of distant recurrence for a patient with a Recurrence Score of 30?

RS 30 = 20% risk of distant recurrence at 10 years

Dotted lines represent 95% CI
Onco
type DX® Breast Cancer Assay

• **Onco
type DX®** provides valuable information on:
  - Clinical prognosis
  - Predicted chemo benefit
  - Quantitative data on ER / PR / HER2
  - Node positive patients
Rapidly Growing Adoption

Annual Oncotype DX® Worldwide Test Results Delivered

Key Milestones

- NSABP B14 Publication
- NSABP B20 Presentation
- Kaiser Presentation
- Medicare Coverage
- NSABP B20, Kaiser Publications
- Aetna, United, Cigna Coverage
- ASCO and NCCN Guidelines
- SWOG 8814 Presentation
- HER2, ER and PR Scores
- Node + Report
- Aromatase Inhibitors
- 95% U.S. Coverage
Investment in Delivering World Class Service

ORDER ENTRY
- Order Entry
- Insurance Provider
- Benefits Investigation
- Patient Information Retrieval
- Fax Request
- FedEx

INTAKE
- Specimen Retrieval
- Specimen Accessioning
- Fax
- Phone

PATHOLOGY
- Pathology Review
- Histopathology
- FedEx

ANALYTICAL LABORATORY
- Extraction
- Quantitation
- gDNA Detection
- Reverse Transcription
- QPCR

REPORTS FULFILLMENT
- Results Generation
- Report Delivery
- Billing

MATERIAL RETURN
- Materials Return
- Online, Fax
- FedEx
- Reimbursement

SARP CRM
- OnBase
- EDI Services
- Online Portal

GEMTools (LIMS)
- Material Manager
- Data Services

SARP CRM
- Result Generation Service
- EDI Services
- Material Manager
- Report Delivery
- Online Portal
- Electronic Claim
- HARP
Genomic Health Accomplishments are Contributing to a New Standard of Care in Cancer Diagnosis and Treatment Planning

- Rapid growth in Oncotype DX® Breast adoption and revenue
- >100,000 tests delivered
- >8,000 Physicians have used Oncotype DX®
- Recommended in ASCO and NCCN clinical guidelines
- >95% of U.S. insured lives covered by payors (BCBS Tec Approved)
- Expanded utility of Oncotype DX®
  - Node positive patients
  - ER, PR and HER2 single scores
  - Aromatase inhibitor-treated patients
- Over 4,000 patients in 13 clinical trials with validation studies conducted in the US, EU, and Japan.
- Breast Cancer tissues samples received from 40 countries
Long Road to Standard of Care

- We believe well designed clinical trials resulting in published (Peer Reviewed) meeting the needs of the patient, providers and payors will lead to Standard of Care
Bringing Personalized Medicine to the Forefront for Breast Cancer Patients…. Obstacles?

- Adoption driven by the Peer Review publications and accelerated with ASCO and NCCN guidelines
- Reimbursement acceptance (95% coverage for Node Negative, ER+ Breast Cancer) driven by Payor Tec Assessments.
  - Analytical Validity
  - Clinical Validity: “Prospective” vs. “Prospective End Points”
  - Clinical Utility and Actionability
  - Comparative Utility
  - Pathway to the Market for IVD/MIA tests – CLIA vs. the FDA
  - Billing and Coding – CPT codes vs. MISC and “S” Codes
  - Pharmacoeconomics - “Value Pricing” – Cost Effective or even Cost Savings?
Disruptive?

- Changing established Medical Oncology treatment patterns
- Managing the impact of Provider revenue disruptions
- Pathologists understanding of how Oncotype DX® fits into their space?
  - Competing or Complementing?
  - Kits vs. Centralized Lab?
  - Tissue access, selection, ownership, and control
  - Turn Around Time for results and Time to Block return
  - Medicare *Date of Service Rule* for “Archival Specimens,” who is responsible for billing?
  - Lab and Hospital Services facilitate “send outs” without compensation
CAP 2008: Call to Action

- **trans**FORM**ation** of the specialty of pathology
  - “Understand that your value is beyond diagnosis & also should center on influencing prevention, prognosis & treatment” - Dr. Jared Schwartz, President of CAP

- **Oncotype DX®** is an important piece of the puzzle that will assist providers and patients in making treatment decisions. It is not the whole puzzle.

- **Pathologists** play a critical role in completing the puzzle.
  - Continue to embrace personalize medicine
  - Be a source of expert on available clinically valid tests
  - Serve as interpreter & consolidator of results
  - Help guide & educate multidisciplinary breast oncology teams
  - Work with reference labs to streamline process
  - Insure appropriate payment for your services
Collaboration

To facilitate a collaborative effort, Genomic Health provides:

• **Knowledge to assist in the patient treatment decision:**
  – We have 15 Physicians (11 Pathologist) interfacing on a regular basis with Pathologist, Surgeons and Medical Oncologist
  – Our Pathologist use the Aperio digital pathology system

• **Supporting the process and the patient:**
  – Customer Service (65)
  – Reimbursement Support Services (90)
  – Field Genomic Liaisons (80)
  – Hospital contracting group (14)
  – Peer to Peer CME education support for Pathologist /Lab staff
Collaboration

In the Future we are looking at:

- Continuing to add value to Oncotype DX®
- Stronger collaboration with Pathologist and Labs
  - Miniaturization and/or Kits?
  - Streamlining: Treatment Pathways and EMR
  - Partnerships, research and commercial - Publications
  - More efficient ways to reimburse you for “your” services
- Ways to implement the Aperio system with our customers to improve the quality of our assay and result
- Continued work on billing and coding for “value”
- Working with Hospitals, Societies, Advocates, CMS and Washington to address the DOS or 14 day rule
- Continued work with Pathologists, Lab associations and Trade groups to provide input to the FDA and CLIA on the commercial pathways for IVD/MIA’s
Future Directions in Breast Cancer

- **Oncotype DX®**
  - N-, ER+ Breast Cancer Recurrence
  - CMF Chemotherapy Benefit
  - Anthracycline Chemotherapy Benefit
  - Taxane Response
  - DCIS
  - TAILORx Trial Results
  - Other Targeted Therapies
  - ER-Negative Breast Cancer
  - Quantitative Single Gene Reporting

- **Node-Positive Breast Cancer**

- **Tamoxifen Benefit**
  - Aromatase Inhibitors (ongoing)

- **Future Directions**
  - CMF Chemotherapy Benefit
# Growing Product Pipeline

## 2009 - 2010

<table>
<thead>
<tr>
<th>Product</th>
<th>Early Development</th>
<th>Development</th>
<th>Validation</th>
<th>Commercial</th>
<th>U.S. Incidence¹</th>
<th>Global Incidence²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breast</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>215,000</td>
<td>1.3 million</td>
</tr>
<tr>
<td>21-Gene Oncotype DX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N-, ER+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single gene reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aromatase Inhibitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expanded/21+ genes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemo Benefit (eg, taxane)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Colon</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>120,000</td>
<td>1.2 million</td>
</tr>
<tr>
<td>Stage II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Erbitux</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prostate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>270,000</td>
<td>780,000</td>
</tr>
<tr>
<td>Non-Small Cell Lung</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>160,000</td>
<td>1.2 million</td>
</tr>
<tr>
<td>Renal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40,000</td>
<td>210,000</td>
</tr>
<tr>
<td>Melanoma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70,000</td>
<td>160,000</td>
</tr>
</tbody>
</table>

¹Mattson
Thank You!