A Tool for Individualized Breast Cancer Treatment

OncoType DX® provides individualized Recurrence Score® results that assess the potential benefit of chemotherapy and the likelihood of distant breast cancer recurrence, for patients with node-negative or node-positive, ER-positive, HER2-negative invasive breast cancer.

OncoType DX is also available for patients with ductal carcinoma in situ (DCIS). The DCIS Score™ quantifies the likelihood of 10-year recurrence for any local event (DCIS or invasive carcinoma), as well as specifically for an invasive carcinoma local event.

Key OncoType DX Publications

Clinical Validation

1. A Multigene Assay to Predict Recurrence of Tamoxifen-Treated, Node-Negative Breast Cancer

2. A Population-Based Study of Tumor Gene Expression and Risk of Breast Cancer Death Among Lymph Node-Negative Patients
   Habel LA, Shak S, Jacobs MK, et al.
   Breast Cancer Res. 2006;8(3):R25

3. Gene Expression and Benefit of Chemotherapy in Women with Node-Negative, Estrogen Receptor-Positive Breast Cancer
   J Clin Oncol. 2006;24(23):3726-34

4. Prediction of Risk of Distant Recurrence Using the 21-Gene Recurrence Score in Node-Negative and Node-Positive Postmenopausal Patients with Breast Cancer Treated with Anastrozole or Tamoxifen: a TransATAC Study
   J Clin Oncol. 2010;28(11):1829-34

   Albain KS, Barlow WE, Shak S, et al, for The Breast Cancer Intergroup of North America
   Lancet Oncol. 2010;11(1):55-65


7. Clinical Significance of the 21-Gene Signature (OncoType DX) in Hormone Receptor-Positive Early Stage Primary Breast Cancer in the Japanese Population
   Cancer. 2010;116(13):3112-8
**Decision Impact**

8. Impact of a Commercial Reference Laboratory Test Recurrence Score on Decision Making in Early-Stage Breast Cancer
   Oratz R, Paul D, Cohn AL, et al.
   *J Oncol Pract.* 2007;3(4):182-6

9. Does Oncotype DX Recurrence Score Affect the Management of Patients with Early-Stage Breast Cancer?

10. The Influence of a Gene Expression Profile on Breast Cancer Decisions

    *J Clin Oncol.* 2010 Apr 1;28(10):1671-6


**Neoadjuvant Treatment**

    *J Clin Oncol.* 2005;23(29):7265-77

14. Gene Expression Patterns in Formalin-Fixed, Paraffin-Embedded Core Biopsies Predict Docetaxel Chemosensitivity in Breast Cancer Patients
    Chang JC, Makris A, Gutierrez MC, et al.

15. 21-Gene Expression Profile Assay on Core Needle Biopsies Predicts Responses to Neoadjuvant Endocrine Therapy in Breast Cancer Patients
    *Breast.* 2009;18(3):171-4

16. The Role of the Breast Cancer Surgeon in Personalized Cancer Care: Clinical Utility of the 21-Gene Assay

**Health Economics**

17. Economic Analysis of Targeting Chemotherapy Using a 21-Gene RT-PCR Assay in Lymph Node-Negative, Estrogen Receptor-Positive, Early-Stage Breast Cancer
    Hornberger J, Cosler LE, Lyman GH

18. Impact of a 21-Gene RT-PCR Assay on Treatment Decisions in Early-Stage Breast Cancer: An Economic Analysis Based on Prognostic and Predictive Validation Studies
    Lyman GH, Cosler LE, Kuderer NM, et al.
    *Cancer.* 2007;109(6):1011-8

    Hornberger J, Lyman GH, Chien R
    *J Clin Oncol.* 2010;28(22):e382

20. Cost-Effectiveness Analysis of Recurrence Score-Guided Treatment Using a 21-Gene Assay in Early Breast Cancer
    Tsoi DT, Inoue M, Kelly CM, et al.
21. Economic Implications of 21-Gene Breast Cancer Risk Assay From the Perspective of an Israeli-Managed Health-Care Organization
   *Value Health*. 2010;13(4):381-7

22. US Insurance Program’s Experience with a Multigene Assay for Early-Stage Breast Cancer
   *J Oncol Pract*. 2011:e38s-e45s

23. Cost-Effectiveness of 21-Gene Assay in Node-Positive, Early-Stage Breast Cancer
   Vanderlaan BF, Broder MS, Chang EY, et al.
   *Am J Manag Care*. 2011;17(7):455-464

24. Clinical Validity/Utility, Change in Practice Patterns, and Economic Implications of Risk Stratifiers to Predict Outcomes for Early-Stage Breast Cancer: A Systematic Review
   Hornberger J, Alvarado M, Rebecca C, et al.

**Platform Technology**


26. Analytical Validation of the Oncotype DX Genomic Diagnostic Test for Recurrence Prognosis and Therapeutic Response Prediction in Node-Negative, Estrogen Receptor-Positive Breast Cancer


**Assay Development**

28. Prognostic Role of a Multigene Reverse Transcriptase-PCR Assay in Patients with Node-Negative Breast Cancer Not Receiving Adjuvant Systemic Therapy
   Esteva FJ, Sahin AA, Cristofanilli M, et al.
   *Clin Cancer Res*. 2005;11(9):3315-19

29. Tumor Gene Expression and Prognosis in Breast Cancer Patients with 10 or More Positive Lymph Nodes
   *Clin Cancer Res*. 2005;11(24 Pt 1):8623-31

30. Predicting Response to Primary Chemotherapy: Gene Expression Profiling of Paraffin-Embedded Core Biopsy Tissue
   Mina L, Soule SE, Badve S, et al.

   Paik S
Additional Oncotype DX Assay–Related Articles

Association Between the 21-Gene Recurrence Score Assay and Risk of Locoregional Recurrence in Node-Negative, Estrogen Receptor–Positive Breast Cancer: Results From NSABP B-14 and NSABP B-20
J Clin Oncol. 2010;28(10):1677-83

Development of the 21-Gene Assay and Its Application in Clinical Practice and Clinical Trials
Sparano JA, Paik S

American Society of Clinical Oncology 2007 Update of Recommendations for the Use of Tumor Markers in Breast Cancer
Harris L, Fritsche H, Mennel R, et al.
J Clin Oncol. 2007;25(33):5287-312

Individualized Care for Patients with Cancer – A Work in Progress
Bast Jr. RC, Hortobagyi GN

A Step in the Right Direction
Swain SM
J Clin Oncol. 2006;24(23):3717-8

Roadmap for Developing and Validating Therapeutically Relevant Genomic Classifiers
Simon R
J Clin Oncol. 2005;23(29):7332-41

An Ideal Prognostic Test for Estrogen Receptor–Positive Breast Cancer?
Paik S, Tang G, Fumagalli D

Association Between Standard Clinical and Pathologic Characteristics and the 21-Gene Recurrence Score in Breast Cancer Patients: A Population-Based Study
Cancer. 2008;112(4):731-6

Thresholds for Therapies: Highlights of the St Gallen International Expert Consensus on the Primary Therapy of Early Breast Cancer 2009
Goldhirsch A, Ingle JN, Gelber RD, et al, Panel Members

Gene Expression-Based Prognostic and Predictive Markers for Breast Cancer: A Primer for Practicing Pathologists
Kim C, Taniyama Y, Paik S
Arch Pathol Lab Med. 2009;133:855-9

Review of the Clinical Studies Using the 21-Gene Assay
Kelly CM, Warner E, Tsoi DT, et al.

Use of Archived Specimens in Evaluation of Prognostic and Predictive Biomarkers
Simon RM, Paik S, Hayes DF

Comparison of the Prognostic and Predictive Utilities of the 21-Gene Recurrence Score Assay and Adjuvant! for Women with Node-Negative, ER-Positive Breast Cancer: Results From NSABP B-14 and NSABP B-20
Breast Cancer Res Treat. 2011;127:133-142

Risk of Recurrence and Chemotherapy Benefit for Patients With Node-Negative, Estrogen Receptor–Positive Breast Cancer: Recurrence Score Alone and Integrated with Pathologic and Clinical Factors
J Clin Oncol. 2011;4365-4372
Estrogen Receptor (ESR1) mRNA Expression and Benefit From Tamoxifen in the Treatment and Prevention of Estrogen Receptor–Positive Breast Cancer
*J Clin Oncol*. 2011:4160-4167

Goldhirsch A, Wood WC, Coates AS, et al, Panel Members

Quantitative Single Gene Reporting–Related Articles

Estrogen- and Progesterone-Receptor Status in ECOG 2197: Comparison of Immunohistochemistry by Local and Central Laboratories and Quantitative Reverse Transcription Polymerase Chain Reaction by Central Laboratory
Badve SS, Baehner FL, Gray RP, et al.

Problems and Solutions in the Evaluation of Hormone Receptors in Breast Cancer
Allred DC

Human Epidermal Growth Factor Receptor 2 Assessment in a Case-Control Study: Comparison of Fluorescence In Situ Hybridization and Quantitative Reverse Transcription Polymerase Chain Reaction Performed by Central Laboratories
Baehner FL, Achacoso N, Maddala T, et al.
*J Clin Oncol*. 2010:4300-4306

Scientific Presentations, Posters & Abstracts

2012 American Society of Clinical Oncology (ASCO) – Chicago, IL

Abstract # 549
A prospective clinical utility study of the impact of the 21-gene recurrence score assay (Oncotype DX) in estrogen receptor positive (ER+) node negative (pN0) breast cancer in academic Canadian centers.
Davidson J, Cromwell I, Ellard S, et al; British Columbia Cancer Agency (Fraser Valley Centre), Surrey, BC, Canada; Canadian Centre for Applied Research in Cancer Control, Vancouver, BC, Canada; British Columbia Cancer Agency (Centre for the Southern Interior), Kelowna, BC, Canada

Abstract # 552
Prospective comparison of recurrence score and independent central pathology assessment of prognostic tools in early breast cancer (BC): Focus on HER2, ER, PR, Ki-67 results from the phase III WSG-Plan B trial
Gluz O, Kreipe H, Christgen M, et al; West German Study Group; West German Study Group, Moenchengladbach, Germany; Hannover Medical School, Hannover, Germany

Abstract # 555
Obesity at diagnosis and breast cancer (BC) recurrence risk based on the 21-gene assay recurrence score (RS).
Ridolfi K, Zhang C, Onitilo A, et al; Medical College of Wisconsin, Milwaukee, WI; University of Wisconsin Carbone Cancer Center, Madison, WI; Marshfield Clinic, Weston, WI

Abstract # 563
Impact of exogenous female hormone use (EHU) on breast cancer (BC) recurrence as assessed by the 21-gene assay (Oncotype DX)
Ledesma W, Onitilo A, Zhang C, et al; University of Wisconsin Carbone Cancer Center, Madison, WI; Marshfield Clinic, Weston, WI; Medical College of Wisconsin, Milwaukee, WI
Abstract # 568
Prospective study of the impact of using the 21-gene recurrence score assay on clinical decision making in women with estrogen receptor-positive, HER2-negative, early-stage breast cancer in France.
Gligorov J, Pivot X, Naman H, et al; Francilien Breast Intergroup; APHP Tenon APREC, CancerEst, University Paris VI, Paris, France; University Hospital of Besancon, Besancon, France

Abstract # 569
Evaluation of Oncotype DX testing and subsequent patterns of care in patients (pts) with early-stage breast cancer (ESBC).
Fitzgerald M, Hassell R, Haislip S, et al; Cardinal Health, Specialty Solutions, Dublin, OH; Georgia Cancer Specialists PC, Atlanta, GA; Genomic Health, Redwood City, CA

Abstract # 571
Evaluation of variables that may impact chemotherapy (CT) administration after determination of Oncotype DX (ODX) recurrence score (RS).
Bowen K, Gilmore J, Szabo S, et al; Georgia Cancer Specialists PC, Atlanta, GA; Cardinal Health, Specialty Solutions, Dublin, OH; Genomic Health, Redwood City, CA

Abstract # 1005
Correlation between the DCIS score and traditional clinicopathologic features in the prospectively designed E5194 clinical validation study.
Badve S, Gray R, Baehner F, et al; Indiana University School of Medicine, Indianapolis, IN; Dana-Farber Cancer Institute, Boston, MA; Genomic Health, Redwood City, CA

Abstract # 1021
10-year update of E2197: Phase III doxorubicin/docetaxel (AT) versus doxorubicin/cyclophosphamide (AC) adjuvant treatment of LN+ and high-risk LN-breast cancer and the comparison of the prognostic utility of the 21-gene recurrence score (RS) with clinicopathologic features.
Sparano J, O’Neill A, Gray R, et al; Albert Einstein College of Medicine, Bronx, NY; Dana-Farber Cancer Institute, Boston, MA; Mayo Clinic, Jacksonville, FL

Abstract # 1525
Cost-effectiveness of the 21-gene recurrence score assay in the setting of multifactorial decision making for chemotherapy in early-stage breast cancer
Reed S, Dinan M, Schulman K, Lyman G; Duke Clinical Research Institute, Durham, NC; Duke University, Durham, NC

Abstract # 6063
Rural versus urban differences among patients (pts) with hormone-receptor positive (HR+) breast cancer (BC) and a 21-gene assay recurrence score (RS).
Andreason M, Zhang C, Onitilo A, et al; University of Wisconsin, Madison, WI; Biostatistics, University of Wisconsin, Madison, WI; Marshfield Clinic, Weston, WI

2011 San Antonio Breast Cancer Symposium (SABCS) — San Antonio, TX

Abstract #S4-6
A Quantitative Multigene RT-PCR Assay for Predicting Recurrence Risk After Surgical Excision Alone Without Irradiation for Ductal Carcinoma In Situ (DCIS): A Prospective Validation Study of The DCIS Score From ECOG E5194
Solin L, Gray R, Baehner F, et al; Albert Einstein Medical Center, Philadelphia, PA; Eastern Cooperative Oncology Group, Boston, MA; Genomic Health, Inc, Redwood City, CA

Abstract #S4-3
Prospective Comparison of Risk Assessment Tools in Early Breast Cancer (Recurrence Score, uPA/PAI-1, Central Grade, and Luminal Subtypes): Final Correlation Analysis From the Phase III WSG-Plan B Trial
Gluz O, Kreipe H, Degenhardt T, et al; West German Study Group, Moenchengladbach, Germany; Medizinische Hochschule, Hannover, Germany; University of Muenster, Muenster, Germany

Abstract #P5-13-09
Correlation of Oncotype DX Recurrence Scores with Pathologic Response Following Neoadjuvant Ixabepilone and Cyclophosphamide in Patients with HER2-Negative Breast Cancer: A Sarah Cannon Research Institute Phase II Trial
Yardley D, Peacock N, Hendricks C, et al; Sarah Cannon Research Institute, Nashville, TN; Tennessee Oncology, PLLC, Nashville, TN; Center for Cancer and Blood Disorders, Bethesda, MD
Abstract #P1-07-11
Consistency and Control in Clinical Assay Technology Over Time: The Oncotype DX Recurrence Score and Assessment of Single Gene Expression Levels

Abstract #P3-06-05
Comparison of Oncotype DX® Recurrence Scores Between Surgical and Core Biopsy Specimens in Breast Cancer Patients
Stull T, Goodwin M, Anderson J, et al; The Bryn Mawr Hospital, Bryn Mawr, PA; Genomic Health, Inc, Redwood City, CA

Abstract #P1-07-22
A Venezuelan Study of Breast Cancer Estrogen Receptor, Progesterone Receptor and HER2 Receptor Expression by the Standard Method, Immunohistochemistry (IHC), Compared to a New Method, Quantitative Reverse Transcription Polymerase Chain Reaction (RT-PCR)
Marin C-EM, Ramirez A, Baehner F, et al; Fundacion BADAN, Caracas, Miranda, Venezuela; Genomic Health, Inc, Redwood City, CA

Abstract #P1-10-05
Is the 21-Gene Breast Cancer Test (Oncotype DX®) Cost-Effective?
Pronzato P, Plun-Favreau J; Istituto Naz.le Ricerca Cancro, Genova, Italy; Genomic Health International Sàrl, Geneva, Switzerland

Abstract #P1-10-04
Cost-Utility of the 21-Gene Breast Cancer Assay (Oncotype DX®) in the Irish Healthcare Setting
Lacey L, Chien R, Hornberger J; Lacey Solutions Ltd, Skerries, County Dublin, Ireland; Cedar Associates LLC, Menlo Park, CA; Stanford University, Stanford, CA

Abstract #P1-10-06
Cost-Effectiveness of Using the 21-Gene Breast Cancer Assay in France
Chereau E, Rouzier R, Bennett H; Hospital Tenon, Paris, France; Cardiff Research Consortium, Cardiff, United Kingdom

Abstract #P1-10-07
Cost-Effectiveness Evaluation of the Oncotype DX® Breast Cancer Assay in Clinical Practice in the UK
Holt S, Bennett H, Bertelli G, et al; Prince Philip Hospital, Llanelli, United Kingdom; Cardiff Research Consortium, Cardiff, United Kingdom; Singleton Hospital, Swansea, United Kingdom

Abstract #P5-14-26
Results From a Prospective Clinical Study on the Impact of Oncotype DX on Adjuvant Treatment Decision Making in a Cohort of 142 UK Patients
Holt S, Bertelli G, Brinkworth E, et al; Prince Philip Hospital, Llanelli, Carmarthenshire, United Kingdom; Singleton Hospital, Swansea, West Glamorgan, United Kingdom; Bronglais Hospital, Aberystwyth, Ceredigion, United Kingdom

Abstract #P4-09-18
Australian Decision Impact Study: The Impact of Oncotype DX Recurrence Score (RS) on Adjuvant Treatment Decisions in Hormone Receptor Positive (HR+), Node Negative (N0) and Node Positive (N+) Early Stage Breast Cancer (ESBC) in the Multidisciplinary Clinic (MDC)
de Boer R, Baker C, Speakman D, et al; Royal Melbourne Hospital, Melbourne, Victoria, Australia; Austin Hospital, Melbourne, Victoria, Australia; Peter MacCallum Cancer Institute, Melbourne, Victoria, Australia

Abstract #P2-12-26
Impact of the Recurrence Score on Adjuvant Decision-Making in ER-Positive Early Breast Cancer — Results of a Large Prospective Multicentre Decision Impact Study in Node Negative and Node Positive Disease
Rezai M, Eiermann W, Kümmel S, et al; Luisenkrankenhaus, Düsseldorf, Germany; Rotkreuzklinikum, München, Germany; Kliniken Essen-Mitte, Essen, Germany

Abstract #PD06-02
Cost-Effectiveness Evaluation of the Oncotype DX® Breast Cancer Assay in Clinical Practice in the UK
Holt S, Bennett H, Bertelli G, et al; Prince Philip Hospital, Llanelli, United Kingdom; Cardiff Research Consortium, Cardiff, United Kingdom; Singleton Hospital, Swansea, United Kingdom
**Abstract #P5-14-03**

Genomic Comparison of Paired Primary Breast Carcinomas and Macrometastatic Lymph Node Metastases Using Quantitative RT-PCR by Oncotype DX: Assessment of the Recurrence Score and Quantitative Single Genes

Boolbol S, Kirstein L, Harshan M, et al; Beth Israel Medical Center, New York, NY; Genomic Health, Inc, Redwood City, CA

**Abstract #PD03-09**

Breast Cancer Recurrence Risk Probed By Whole Transcriptome Next Generation Sequencing in 136 Patients

Baker J, Liu M-L, Crager M, et al; Genomic Health, Inc, Redwood City, CA; Providence St. Joseph Medical Center, Burbank, CA

**Abstract #P5-18-03**

First Interim Toxicity Analysis of the Randomized Phase III WSG Plan B Trial Comparing 4xEC-4xDCr Versus 6xC in Breast Cancer Patients with HER2 Negative BC

Nitz U, Gluz O, Kreipe H, et al; West German Study Group, Moenchengladbach, Germany; Breast Centre Niederrhein/Bethesda Hospital, Moenchengladbach, Germany; Bethesda Hospital, Wuppertal, Germany

2011 American Society of Clinical Oncology (ASCO) – Chicago, IL

**Abstract #558**

A study of the Recurrence Score By the 21-Gene Signature Assay as a Predictor of Clinical Response To Neoadjuvant Exemestane For 24 Weeks in Estrogen-Receptor-Positive Breast Cancer

Masuda N, Toi M, Ueno T, et al; National Hospital Organization Osaka National

**Abstract #1066**

Ixabepilone and Cyclophosphamide as Neoadjuvant Therapy in HER2-negative Breast Cancer With Exploratory Oncotype DX Assessments: A Sarah Cannon Research Institute Phase II Trial

Peacock NW, Yardley DA, Hendricks CB, et al; Tennessee Oncology, Nashville, TN; Sarah Cannon Research Institute, Nashville, TN; National Capital Clinical Research Consortium, Bethesda, MD

**Abstract #592**

Using the 21-Gene Recurrence Score and the Recently Developed Recurrence Score-Clinical-Pathologic to Assess Recurrence Risk in Patients with Node-Negative, ER-Positive Early-Stage Breast Cancer Receiving Aromatase Inhibitor Treatment Alone

Crager M, Tang G, Shak S; Genomic Health, Inc, Redwood City, CA; NSABP Biostatistical Center and University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA

**Abstract #6111**

A Cost Benefit Analysis of the 21-Gene Breast Cancer Assay Within a Canadian Health Care System

Hassan S, Mittmann N; HOPE Research Centre, Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada

**Abstract #625**

Evaluating Utilization Characteristics for the Oncotype DX Recurrence Score in Early-Stage Breast Cancer


**Abstract #632**

Evaluation of Recurrence Score and Traditional Clinicopathologic Assessments in a Large ER-Positive, Lymph Node-Negative Patient Cohort

Liebermann N, Baehner FL, Soussan-Gutman L, et al; Clalit Health Services, Tel Aviv, Israel; University of California, San Francisco, San Francisco, CA; Teva Pharmaceutical Industries, Netanya, Israel
Abstract #e11105
Evaluation of Relation Between Oncotype DX Recurrence Score and Adjuvant Chemotherapy Administration

2010 San Antonio Breast Cancer Symposium (SABCS) — San Antonio, TX

Comparing the Prediction of Chemotherapy Benefit in Patients with Node-Negative, ER-Positive Breast Cancer Using the Recurrence Score and a New Measure that Integrates Clinical and Pathologic Factors with the Recurrence Score

Meta-Analysis of the Decision Impact of the 21-Gene Breast Cancer Recurrence Score in Clinical Practice
Hornberger J, Chien R

Quantitative Gene Expression Analysis in a Large Cohort of Estrogen-Receptor Positive Breast Cancers: Characterization of the Tumor Profiles in Younger Patients (≤40 yrs) and in Older Patients (≥70 yrs)
Shak S, Baehner FL, Stein M, et al

Prognostic Value of Genomic Analysis After Neoadjuvant Chemotherapy for Breast Cancer
Mayer EL, Shak S, Miller K, et al

Quantitative Gene Expression by RT-PCR in Classic and Variant Forms of Lobular Carcinoma in Estrogen Receptor Positive Invasive Breast Cancer
Anderson JM, Yoshizawa C, Winer EP, et al

2010 American Society of Clinical Oncology (ASCO) – Chicago, IL

Abstract #509
Recurrence Risk of Node-Negative and ER-Positive Early-Stage Breast Cancer Patients by Combining Recurrence Score, Pathologic, and Clinical Information: A Meta-Analysis Approach

Abstract #511
Potential Biologic Causes of the Racial Survival Disparity in Adjuvant Trials of ER-Positive Breast Cancer
Albain KS, Barlow WE, Shak S, et al, for The Breast Cancer Intergroup of North America

Abstract #3097
Association of Vorinostat with Decrease in Gene Expression of Proliferation-Related Genes in Tumors from Women with Newly Diagnosed Breast Cancer
Stearns V, Jacobs LK, Tsangaris TN, et al

Abstract #6075
The Recurrence Score and Chemotherapy Treatment in Node-Positive, ER+ Early-Stage Breast Cancer Patients in Israel

Abstract #e11077
Effect of 21-Gene Recurrence Score Results on Treatment Recommendations in Patients Age 65 and Older with Lymph Node-Positive, Estrogen Receptor-Positive Breast Cancer
Oratz R, Chao C, Skrzypczak S, et al

Abstract #4501
Identification of Prognostic Genomic Markers in Patients with Localized Clear Cell Renal Cell Carcinoma (ccRCC)
2010 American Society of Clinical Oncology (ASCO) Breast Cancer Symposium — National Harbor, MD

Abstract #2
Quantitative Gene Expression by RT-PCR in the Tubular, Cribriform, Mucinous, and Papillary Histologic Subtypes of Invasive Breast Cancer
Tan V, Baehner FL, Yoshizawa C, et al

2010 Miami Breast Cancer Conference — Miami, FL

Quantitative Gene Expression Analysis in Ductal Carcinoma In Situ: Feasibility Study Using RT-PCR on Fixed Paraffin-Embedded Tissues
Baehner FL, Achacoso N, Lopatin M, et al

2010 Inter-American Breast Cancer Conference Annual Meeting — Cancun, Mexico

The Distribution of Oncotype DX® Recurrence Score® Results in Latin America Compared with the United States
Shak S, Decker T, Burke E, et al

2010 American Society of Breast Surgeons Annual Meeting — Las Vegas, NV

The Distribution of Recurrence Scores® and Clinical Parameters in Oncotype DX® Submissions by Surgeons Compared with Medical Oncologists
Chao C, Baehner FL, Bugarini R, et al

2010 European Breast Cancer Conference — Barcelona, Spain

Abstract #386
Special Histologic Subtypes of Estrogen Receptor Positive Breast Cancer by Quantitative RT-PCR

2010 United States and Canadian Academy of Pathology (USCAP) Annual Meeting — Washington, DC

Abstract #148
The New Hormone Receptor Cutoff: For Defining Hormone Receptor Positivity What is the Impact of the New 1% Cutoff Versus the Old 10% Cutoff on Hormone Receptor Concordance Between Local IHC, Central IHC and Central RT–PCR?
Baehner FL, Gray R, Childs B, et al

Abstract #149
ER and PR Discordances: Comparison of IHC by Local and Central Laboratory and Reverse Transcription Polymerase Chain Reaction by Central Laboratory in ECOG Breast Cancer Study E2197
Badve S, Gray R, Childs B, et al

Abstract #150
Gene Expression by Standardized Quantitative Reverse Transcription Polymerase Chain Reaction in the Special Histologic Subtypes of ER-Positive Invasive Breast Cancer

2009 San Antonio Breast Cancer Symposium (SABCS) — San Antonio, TX

Abstract #112
Albain KS, Barlow WE, Shak S, et al, for the Breast Cancer Intergroup of North America
Abstract #2031
Effect of 21-Gene Recurrence Score Results on Treatment Recommendations in Patients with Lymph Node-Positive, Estrogen Receptor-Positive Breast Cancer
Oratz R, Chao C, Skrzypczak S, et al

Abstract #5165
Gene Expression Profiling of Phenotypically-Defined Hormone-Receptor Positive Breast Cancer: Evidence for Increased Transcriptional Activity of the Insulin Growth Factor Receptor Pathway and Other Pathways
Sparano JA, Gray R, Goldstein LJ, et al

Abstract #6004
HER2 Amplification, Polysomy Status and Breast Cancer Survival in a Large Kaiser Permanente Case-Control Study: Assessment of HER2 by Quantitative Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) and Fluorescence In Situ Hybridization (FISH)
Baehner FL, Achacoso N, Maddala T, et al

Abstract #6021
Molecular Characterization of Breast Cancer Core Biopsy Specimens by Gene Expression Analysis Using Standardized Quantitative RT-PCR
Anderson JM, Shak S, Millward C, et al

2009 American Society of Clinical Oncology Breast Cancer Symposium — San Francisco, CA

Abstract #64
Biopsy Cavities in Breast Cancer Specimens: Their Impact on Quantitative RT-PCR Gene Expression Profiles and Recurrence Risk Assessment
Baehner FL, Quale C, Cherbavaz D, et al

Abstract #500
Genotypic Characterization of Phenotypically Defined Triple-Negative Breast Cancer
Sparano JA, Goldstein LJ, Childs BH, et al
Abstract #25
GRB7-Dependent Pathways are Potential Therapeutic Targets in Triple-Negative Breast Cancer
Sparano JA, Gray R, Goldstein LJ, et al

Abstract #2066
Quantitative Gene Expression Analysis Using OncoType DX in Ductal Carcinoma In Situ that Is Adjacent to Invasive Ductal Carcinoma

Abstract # 3049
Associations Between Estrogen Receptor (ER) Alpha Expression Levels and ER Genotypes
Henry NL, Shak S, Banerjee M, et al

2008 Hematology/Oncology Pharmacy Association (HOPA) — Orlando, FL

Abstract #2601
Low Recurrence Score by the Oncotype DX Breast Cancer Assay Rarely Results in Recommendation for or Administration of Chemotherapy: A Pooled Analysis
Hall P, Skrypczak S, Palmer G

2008 American Society of Clinical Oncology (ASCO) Breast Cancer Symposium — Washington DC

Abstract #13
HER2 Concordance Between Central Laboratory Immunohistochemistry & Quantitative Reverse Transcription Polymerase Chain Reaction in Intergroup Trial E2197
Baehner FL, Gray R, Childs B, et al

Abstract #41
HER2 Assessment in a Large Kaiser Permanente Case-Control Study: Comparison of Fluorescence In Situ Hybridization (FISH) and Quantitative Reverse Transcription Polymerase Chain Reaction (RT-PCR) Performed by Central Laboratories
Baehner FL, Achacoso N, Maddala T, et al

2008 American Society of Clinical Oncology (ASCO) Annual Meeting — Chicago, IL

Abstract #557
Predictive Utility of Progesterone Receptor (PR) and Multigene Expression in Identifying Benefit from Adjuvant Doxorubicin Plus Cyclophosphamide (AC) or Docetaxel (AT) in Intergroup Trial E2197

2008 United States and Canadian Academy of Pathology (USCAP) Annual Meeting — Denver, CO

Abstract #82
Analysis of Revised Nottingham Tumor Grade Constitutive Components and Recurrence Free Interval in ECOG Breast Cancer Study E2197
Baehner FL, Goldstein LJ, Gray R, et al

Abstract #44
Comparison of ER and PR Assessment by Local IHC, Central IHC, and Central Quantitative RT-PCR in ECOG Breast Cancer Study 2197
Badve S, Baehner FL, Gray R, et al

Abstract #47
A Kaiser-Permanente Population-Based Study of Breast Cancer ER and PR Expression by the Standard Method, Immunohistochemistry, Compared to a New Method, Quantitative Reverse Transcription Polymerase Chain Reaction
Baehner FL, Maddala T, Alexander C, et al
Abstract #50
Heterogeneity of Quantitative RT-PCR Measurement of Estrogen and Progesterone Receptor Expression: Comparison of Tissue Microarray Cores to Whole Sections of Paraffin Embedded Breast Cancer Tissue
Baehner FL, Baker J, Salter J, et al

2007 San Antonio Breast Cancer Symposium (SABCS) — San Antonio, TX

Abstract #1043
Recurrence Score by Oncotype DX Evaluated on the Primary Breast Tumor Predicts the 2-Year Survival After First Relapse
Bianchini G, Zambetti M, Mariani P, et al

Abstract #2061
A Retrospective Analysis of the Impact of Oncotype DX Low Recurrence Score Results on Treatment Decisions in a Single Academic Breast Cancer Center
Liang H, Brufsky AM, Lembersky BB, et al

Abstract #3028
Gene Expression by Standardized Quantitative RT-PCR in the Special Histologic Subtypes of Estrogen Receptor-Positive Invasive Breast Cancer
Baehner FL, Watson D, Ballard JT, et al

Abstract #3082
Evaluation of Practice Patterns in the Treatment of Node-Negative, Hormone-Receptor Positive Breast Cancer Patients with the Use of the Oncotype DX Assay at the University of Pennsylvania

Abstract #5029
Estrogen Receptor and Breast Cancer Survival in a Kaiser Permanente Population-Based Study: Comparison of Quantitative Reverse Transcriptase Polymerase Chain Reaction and Immunohistochemistry
Habel LA, Achacoso N, Maddala T, et al

2007 American Society of Clinical Oncology (ASCO) Breast Cancer Symposium — San Francisco, CA

Abstract #27
Association of Individual Genes with Risk of Relapse in Operable Breast Cancer: Analysis of E2197
Sparano JA, Goldstein L, Childs B, et al

Abstract #88
A Kaiser-Permanente Population-Based Study of ER and PR Expression by the Standard Method, Immunohistochemistry (IHC), Compared to a New Method, Quantitative Reverse Transcription Polymerase Chain Reaction (RT-PCR)
Baehner FL, Maddala T, Alexander C, et al

Abstract #106
Use of Estrogen Receptor (ER) Expression by Quantitative RT-PCR to Identify an ER-Negative Subgroup by IHC Who Might Benefit from Hormonal Therapy

2007 American Association for Cancer Research (AACR) Annual Meeting — Los Angeles, CA

Abstract #4423
Optimized RNA Extraction and RT-PCR Provide Successful Molecular Analysis on a Variety of Archival Fixed Tissues

2006 San Antonio Breast Cancer Symposium (SABCS) — San Antonio, TX

Abstract #45
Quantitative RT-PCR Analysis of ER and PR by Oncotype DX Indicates Distinct and Different Associations with Prognosis and Prediction of Tamoxifen Benefit
Baehner FL, Habel LA, Quesenberry CP, et al
Abstract #3116
A Comparison of Estrogen Receptor (ER) Measurement by Three Methods in Node-Negative, Estrogen Receptor (ER)-Positive Breast Cancer: Ligand Binding (LB), Immunohistochemistry (IHC), and Quantitative RT-PCR

Abstract #6039
The Impact on the Recurrence Score Due to Patient Variation in the Quantitative Expression of Individual Genes or Gene Groups

Abstract #6111
Relationship Between Proliferation Genes and Expression of Hormone and Growth Factor Receptors: Quantitative RT-PCR in 10,618 Breast Cancers

Abstract #6118
Subtypes of Breast Cancer Defined by Standardized Quantitative RT-PCR Analysis of 10,618 Tumors

2006 American Society of Clinical Oncology (ASCO) Annual Meeting — Atlanta, GA

Abstract #538
Gene Expression Profiles in Formalin-Fixed, Paraffin-Embedded (FFPE) Core Biopsies Predict Docetaxel Chemosensitivity
Chang JC, Makris A, Hilsenbeck SG, et al

Abstract #6024
Cosler LE, Kuderer NM, Hornberger J, et al

2006 American Association for Cancer Research (AACR) Annual Meeting — Washington, DC

Abstract #3604
Multiple GSTM Gene Family Members Are Recurrence Risk Markers in Breast Cancer
Kiefer M, Hoyt K, Hackett J, et al

2005 San Antonio Breast Cancer Symposium (SABCS) — San Antonio, TX

Abstract #310
Measurement of Gene Expression Using Tissue Microarray Cores of Paraffin-Embedded Breast Cancer Tissue

2005 American Society of Clinical Oncology (ASCO) Annual Meeting — Orlando, FL

Abstract #510
Expression of the 21 Genes in the Recurrence Score Assay and Tamoxifen Clinical Benefit in the NSABP Study B-14 of Node-Negative, Estrogen Receptor-Positive Breast Cancer

2004 San Antonio Breast Cancer Symposium (SABCS) — San Antonio, TX

Abstract #24
Expression of the 21 Genes in the Recurrence Score Assay and Prediction of Clinical Benefit from Tamoxifen in NSABP Study B-14 and Chemotherapy in NSABP Study B-20

Abstract #104
Risk Classification of Breast Cancer Patients by the Recurrence Score Assay: Comparison to Guidelines Based on Patient Age, Tumor Size, and Tumor Grade
Abstract #2081
A 21-Gene RT-PCR Assay in Lymph Node-Negative (LN-), Estrogen Receptor-Positive (ER+) Early-Stage Breast Cancer (ESBC): An Age-Specific Economic Analysis
Lyman GH, Cosler L, Hornberger J

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Abstract #501
Gene Expression Profiles of Paraffin-Embedded Core Biopsy Tissue Predict Response to Chemotherapy in Patients with Locally Advanced Breast Cancer
Gianni L, Zambetti M, Clark K, et al

2004 United States and Canada Academy of Pathology (USCAP) Annual Meeting — Vancouver, British Columbia

Abstract #83
Comparison of ER, PR, HER2, and Ki-67 Quantitative Expression in Formalin-Fixed, Paraffin-Embedded Breast Carcinomas by RT-PCR with Protein Expression by Immunohistochemistry

Abstract #80
Use of Macrodissection in Multi-Gene RNA Analysis of Fixed Paraffin-Embedded Tumor Tissue

Abstract #1491
Reproducibility of Quantitative Gene Expression Analysis by a New RT-PCR Assay Using Fixed Paraffin-Embedded Tissues: A Molecular Tomographic Scanning Study
Cronin M, Watson D, Dutta D, et al

2003 San Antonio Breast Cancer Symposium (SABCS) — San Antonio, TX

Abstract #16
Multi-Gene RT-PCR Assay for Predicting Recurrence in Node-Negative Breast Cancer Patients — NSABP Studies B-20 and B-14

Abstract #17
Prognostic Role of a Multigene Reverse Transcriptase-PCR Assay in Patients with Node-Negative Breast Cancer Not Receiving Adjuvant Systemic Therapy
Esteva FJ, Sahin AA, Cristofanilli M, et al

2003 American Society of Clinical Oncology (ASCO) Annual Meeting — Chicago, IL

Abstract #3416
Tumor Gene Expression and Prognosis in Breast Cancer: Multi-Gene RT-PCR Assay of Paraffin-Embedded Tissue
Esteban JM, Baker J, Cronin M, et al

Abstract #3466
Predicting Response to Neoadjuvant Chemotherapy in Invasive Breast Cancer: Gene Expression Profiling of Paraffin-Embedded Core Biopsy Tissue
Soule SE, Shak S, Baker J, et al
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