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Genomic Health Presents Data Demonstrating Importance of Oncotype DX Breast Recurrence Score® Test in Predicting Outcomes Across Patient Populations at ESMO 2017

New SEER Registry Analysis Indicates Many Young Women Under 40 Years with Node-negative Breast Cancer Do Not Have Aggressive Disease and Experience Excellent Five-year Survival without Chemotherapy

First Presentation of Distant Recurrence Data from German PlanB Study Shows Very Low Recurrence Rates at Five Years in Clinically High-risk Patients with Low Recurrence Score® Results and No Chemotherapy

REDWOOD CITY, Calif., Sept. 11, 2017 /PRNewswire/ -- Genomic Health, Inc. (Nasdaq: GHDX) today announced the presentation of new data that provide additional evidence of the unmatched value of the Oncotype DX Breast Recurrence Score® test in accurately predicting outcomes in early-stage breast cancer patients. The data were presented at the 2017 European Society for Medical Oncology (ESMO) Congress in Madrid.

Results from a first-of-its-kind analysis including over 6,000 patients younger than age 40 from the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Registry program showed that of the 1,767 women tested with Oncotype DX those with a low Recurrence Score® (RS) result (< 18) experienced excellent outcomes with 100 percent breast cancer-specific survival (BCSS) at five years, despite the vast majority of them foregoing chemotherapy. Additionally, results from the West German Study Group's (WSG) PlanB study, one of the largest contemporary adjuvant breast cancer trials in Europe, showed very low rates of distant recurrence in clinically high-risk patients with node-positive or node-negative breast cancer who had low RS results (0-11) following five years of hormone therapy alone.

"The data presented at the 2017 ESMO Congress reinforce the value of the Oncotype DX Breast Recurrence Score test in providing clinicians with critical information to personalize and improve treatment decisions for early-stage breast cancer patients regardless of their age," said Phil Febbo, M.D., chief medical officer, Genomic Health. "These two separate studies once again support the ability of the Oncotype DX test to accurately identify patients who do not benefit from chemotherapy despite being considered high risk based on age or other traditional clinical factors, demonstrating the important role of genomic testing in these populations."

New SEER Registry Analysis Shows Excellent Survival in Breast Cancer Patients Younger than 40 with Low Recurrence Score Results

Breast cancer at a young age is generally associated with a poor prognosis and more aggressive treatment. This large, population-based study analyzed data from the SEER Registry program of BCSS in 1,767 patients younger than age 40 with node-negative, hormone receptor-positive, HER2-negative breast cancer who were treated based on their RS result. Results showed the five-year BCSS rate was 100 percent in the 821 patients with a RS result less than 18 - of whom 83 percent did not receive chemotherapy. Among those with a RS result less than 18, BCSS was also excellent for a large subgroup of patients with no or unknown chemotherapy use and for smaller subgroups of patients younger than age 30 and between 30 and 34 years of age. Similarly, patients with a RS result of 25 or less also had a favorable five-year BCSS. Poor outcomes were observed with high Recurrence Score results despite frequent reported use of chemotherapy. (Abstract #1451P)

"Findings from this SEER analysis provide important outcome information for young women with breast cancer - who often face the most difficult decisions regarding optimal treatment," said Hope S. Rugo, M.D., professor of medicine; director, University of California San Francisco Helen Diller Family Comprehensive Cancer Center. "The results of this analysis indicate that not all young breast cancer patients have aggressive tumor biology and a poor prognosis. In fact, patients with a low Recurrence Score result had excellent survival even without chemotherapy. Based on these findings, women with breast cancer for which there is uncertainty about the benefit from chemotherapy and regardless of age should consider genomic testing to help determine the best way to treat their disease."

Analysis from Prospective PlanB Study Shows Very Low Rates of Distant Recurrence in Clinically High-risk Patients with Low Recurrence Score Results and No Chemotherapy

Distant recurrence results from the PlanB trial were presented for the first time, showing that patients with low RS results

treated with hormonal therapy alone had very low rates of distant recurrence (distant disease-free survival or DDFS) after a median follow-up of 60 months. Five-year DDFS rates were comparable in patients with node-positive (up to three nodes) disease (97.9 percent) and in those with clinically high-risk node-negative disease (97.7 percent). The RS result was found to be the strongest independent predictor for DDFS in multivariable analysis ($p < 0.001$), providing the greatest impact on prognosis and outperforming all other factors, including the traditional criteria of tumor size and tumor grade (Abstract #LBA11). These distant recurrence results provide information beyond the five-year PlanB outcomes published recently in *Breast Cancer Research and Treatment*, which include disease-free survival and overall survival.

"These new study results show the unique value of adding biological information provided by the Oncotype DX test in order to identify low-risk breast cancer patients -- those with 0-3 involved lymph nodes -- who can safely be spared the toxicity and side effects of chemotherapy without compromising outcomes," said Dr. Oleg Gluz, scientific coordinator of the West German Study Group that conducted the PlanB study. "This is especially important for patients who would be considered as intermediate to high risk of recurrence based on traditional clinical parameters. These results confirm previous retrospective studies with Oncotype DX as well as the prospective TAILORx trial."

Additional Oncotype DX® Presentations Confirm Genomic Tests Are Not Interchangeable and Reinforce Unique Value of Recurrence Score Result in Identifying Minority of Patients Who Benefit from Chemotherapy

Results of a head-to-head comparison confirmed that the most common genomic tests in clinical use for early breast cancer (Oncotype DX, MammaPrint®, EndoPredict®, Prosigna® and Breast Cancer Index℠) risk-stratify patients differently, and thus are not interchangeable. These findings have implications for the potential use of adjuvant chemotherapy. (Abstract #187P)

Findings from an analysis of more than 600,000 RS results collected globally demonstrated highly similar distributions of RS results geographically, with more than half of patients classified as low risk (i.e., with a RS result less than 18). These findings mirror observations from prospective registry studies, including SEER and Clalit, as well as the TAILORx and PlanB prospective clinical trials, and suggest that tumor biology as characterized by RS results does not vary by geography. These findings support the generalizability of outcomes-study results across geographic regions. (Abstract #192P)

About Oncotype DX®

The Oncotype DX® portfolio of breast, colon and prostate cancer tests applies advanced genomic science to reveal the unique biology of a tumor in order to optimize cancer treatment decisions. The company's flagship product, the Oncotype DX Breast Recurrence Score® test, has been shown to predict the likelihood of chemotherapy benefit as well as recurrence in invasive breast cancer. Additionally, the Oncotype DX Breast DCIS Score™ test predicts the likelihood of recurrence in a pre-invasive form of breast cancer called DCIS. In prostate cancer, the Oncotype DX Genomic Prostate Score™ test predicts disease aggressiveness and further clarifies the current and future risk of the cancer prior to treatment intervention. With more than 800,000 patients tested in more than 90 countries, the Oncotype DX tests have redefined personalized medicine by making genomics a critical part of cancer diagnosis and treatment. To learn more about Oncotype DX tests, visit www.OncotypeIQ.com, www.MyBreastCancerTreatment.org or www.MyProstateCancerTreatment.org.

About Genomic Health

Genomic Health, Inc. (NASDAQ: GHDX) is the world's leading provider of genomic-based diagnostic tests that help optimize cancer care, including addressing the overtreatment of the disease, one of the greatest issues in healthcare today. With its Oncotype IQ® Genomic Intelligence Platform™, the company is applying its world-class scientific and commercial expertise and infrastructure to lead the translation of clinical and genomic big data into actionable results for treatment planning throughout the cancer patient journey, from diagnosis to treatment selection and monitoring. The Oncotype IQ portfolio of genomic tests and services currently consists of the company's flagship line of Oncotype DX ® gene expression tests that have been used to guide treatment decisions for more than 800,000 cancer patients worldwide. Genomic Health is expanding its test portfolio to include additional liquid- and tissue-based tests, including the recently launched Oncotype SEQ® Liquid Select™ test. The company is based in Redwood City, California, with international headquarters in Geneva, Switzerland. For more information, please visit, www.GenomicHealth.com and follow the company on Twitter: @GenomicHealth, Facebook, YouTube and LinkedIn.

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements relating to the results of clinical studies; the impact of clinical studies on reimbursement and test adoption; the applicability of clinical study results to actual outcomes; the commercial performance of the company's tests; and the benefits of the test to physicians, patients and payors. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially, and reported results should not be considered as an indication of future performance. These risks and uncertainties include, but are not limited to: the risk that the company may not obtain or maintain adequate levels of reimbursement, domestically or abroad, for its existing tests and any future tests it may develop; the ability of the company to achieve expanded coverage of reimbursement for its existing tests and the ability

of any such expanded coverage to result in additional revenue; the ability of test results to change treatment decisions; the risks of competition; the risks and uncertainties associated with the regulation of the company's tests; the results of clinical studies; the applicability of clinical study results to actual outcomes and the ability to demonstrate sufficient clinical utility; unanticipated costs or delays in research and development efforts; and the other risks set forth in the company's filings with the Securities and Exchange Commission, including our most recent report on Form 10-Q for the quarter ended June 30, 2017. These forward-looking statements speak only as of the date hereof. Genomic Health disclaims any obligation to update these forward-looking statements.

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