



December 9, 2016

## The EndoPredict® Test Significantly Outperforms the First-Generation Test in Predicting the Risk of Node-Negative and Node-Positive Breast Cancer Recurrence

### New Data Are Being Featured in a Podium Presentation at SABCS

SALT LAKE CITY, Dec. 09, 2016 (GLOBE NEWSWIRE) -- [Myriad Genetics](#), Inc. (NASDAQ:MYGN), a leader in molecular diagnostics and personalized medicine, today announced results of a large head-to-head study comparing the efficacy of six tests used to predict the recurrence of breast cancer. A key finding was that EndoPredict® (EPclin), a second-generation test, was superior to Oncotype Dx™ (RS), a first-generation test, in predicting the long-term recurrence of breast cancer. The results are being featured today in a podium presentation at the 2016 San Antonio Breast Cancer Symposium (SABCS) in San Antonio, Texas.

"In this important study, EndoPredict more accurately predicted the risk of breast cancer recurrence than the first-generation Oncotype Dx test, particularly in years five to 10 following surgery when half of breast cancer recurrences will happen," said Johnathan Lancaster, M.D., Ph.D., chief medical officer, Myriad Genetic Laboratories. "Clinicians can consider using EndoPredict to identify patients who can forgo chemotherapy with confidence, knowing they have a low risk of recurrence over 10 years."

#### Podium Presentation

**Title:** Comprehensive comparison of prognostic signatures for breast cancer in TransATAC.

**Presenter:** Ivana Sestak, Ph.D.

**Date:** Friday, Dec.9, 2016: 4:15 p.m. CT.

**Location:** S6-05; General Session 6 - Hall 3.

This study was led by scientists at the Institute of Cancer Research in London. The analysis included 818 women with ER+/HER2- breast cancer (591 node-negative; 227 node-positive) from the TransATAC study and compared the power of six predictive signatures, including: clinical treatment score, immunohistochemical markers, Oncotype Dx recurrence score (RS), breast cancer index (BCI), Prosigna™ and EndoPredict (EPclin). Distant recurrence of breast cancer was the primary endpoint and the median follow-up period was 10 years.

Overall, each of the three second-generation tests evaluated (breast cancer index, Prosigna and EndoPredict) outperformed Oncotype Dx in this cohort in predicting the recurrence of breast cancer in both node-negative and node-positive patients across both zero to 10 and five to 10 years post-surgery. In a head-to-head comparison between EndoPredict and Oncotype Dx in this study:

- 1. EndoPredict offered more predictive power than Oncotype Dx across zero to 10 years.**
  - The data show that the likelihood ratio (LR<sub>X</sub><sup>2</sup>, a common measure of predictive power) for EndoPredict was almost double that of Oncotype Dx in node-negative patients (EndoPredict: LR<sub>X</sub><sup>2</sup>= 40.6; Oncotype: LR<sub>X</sub><sup>2</sup>=22.8) and was five times higher in node-positive patients (EndoPredict: LR<sub>X</sub><sup>2</sup>= 35.6; Oncotype: LR<sub>X</sub><sup>2</sup>=6.4).
- 2. EndoPredict had superior predictive power over Oncotype Dx between five to 10 years.**
  - The likelihood ratio for EndoPredict was seven times higher than for Oncotype Dx in node-negative patients (EndoPredict: LR<sub>X</sub><sup>2</sup>= 24.0; Oncotype: LR<sub>X</sub><sup>2</sup>=3.4) and 13 times higher in node-positive patients (EndoPredict: LR<sub>X</sub><sup>2</sup>= 14.9; Oncotype: LR<sub>X</sub><sup>2</sup>=1.1). Importantly, the likelihood ratio for Oncotype DX failed to achieve statistical significance in predicting cancer recurrence in years five to 10 for either node-positive or node-negative patients, indicating an inability to predict distant recurrence over the five to 10 year timeframe.
- 3. EndoPredict was superior in classifying node-positive patients as low-risk compared to Oncotype Dx.**
  - Node-positive patients classified as low risk by EndoPredict had a substantially lower 10-year recurrence rate (5.6 percent) than patients classified as low risk by Oncotype Dx (26.2 percent) as well as a lower five to 10 year recurrence rate (3.3 percent for EndoPredict vs 17.9 percent for Oncotype Dx).

"Myriad is committed to research that improves care for patients with breast cancer. Patients at high risk of cancer recurrence are candidates for adjuvant chemotherapy after surgery, while those at low risk can be spared chemotherapy and the side effects," said Lancaster. "We believe EndoPredict will help clinicians and patients understand the risk of breast cancer recurrence and identify more patients who can safely forgo chemotherapy. Additionally, EndoPredict does not contain an intermediate risk category and each patient receives a clear test result, allowing oncologists to confidently develop their treatment plan."

The TransATAC study, in part, was previously published in the *Journal of the National Cancer Institute* (<http://jnci.oxfordjournals.org/content/108/11/djw149.abstract>). The current presentation at SABCS expands on that article and provides a comprehensive comparison of prognostic signatures for breast cancer. Follow Myriad on Twitter via @MyriadGenetics and stay informed about symposium news and updates by using the hashtag #SABCS16.

### **About EndoPredict**

EndoPredict is a second-generation, multigene test designed to predict disease recurrence in patients diagnosed with breast cancer. The test provides physicians with information to devise personalized treatment plans for their patients. EndoPredict has been validated in approximately 4,000 patients with node-negative and node-positive cancer and has been used clinically in over 13,000 patients. In contrast to the first-generation multigene prognostic test (i.e., Oncotype Dx), EndoPredict detects the likelihood of late metastases (i.e., metastasis formation after more than five years) and, therefore, can guide treatment decisions regarding the need for chemotherapy, as well as extended anti-hormonal therapy. Accordingly, therapy decisions backed by EndoPredict confer a high level of diagnostic safety. For more information, please visit: [www.endopredictusa.com](http://www.endopredictusa.com).

### **About Myriad Genetics**

Myriad Genetics Inc., is a leading personalized medicine company dedicated to being a trusted advisor transforming patient lives worldwide with pioneering molecular diagnostics. Myriad discovers and commercializes molecular diagnostic tests that: determine the risk of developing disease, accurately diagnose disease, assess the risk of disease progression, and guide treatment decisions across six major medical specialties where molecular diagnostics can significantly improve patient care and lower healthcare costs. Myriad is focused on three strategic imperatives: transitioning and expanding its hereditary cancer testing markets, diversifying its product portfolio through the introduction of new products and increasing the revenue contribution from international markets. For more information on how Myriad is making a difference, please visit the Company's website: <https://www.myriad.com/>.

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### **Note to Editors**

Prosigna is a trademark of NanoString Technologies, Seattle, Wash. Oncotype Dx is a trademark of Genomic Health, Redwood City, Calif.

### **Safe Harbor Statement**

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements related to the EndoPredict test significantly outperforming the first-generation test in predicting the risk of node-negative and node-positive breast cancer recurrence; the EndoPredict test being superior to Oncotype Dx and more accurate in predicting the long-term recurrence of breast cancer; the three second-generation tests evaluated outperforming Oncotype Dx in predicting the recurrence of breast cancer in both node-negative and node-positive patients across both zero to 10 and five to 10 years post-surgery; EndoPredict testing offering more predictive power than Oncotype Dx across zero to 10 years; EndoPredict testing having superior predictive power over Oncotype Dx between five to 10 years; EndoPredict testing being superior in classifying node-positive patients as low-risk compared to Oncotype Dx; our belief that EndoPredict testing will help clinicians and patients understand the risk of breast cancer recurrence and identify more patients who can safely forgo chemotherapy; data being presented at the 2016 San Antonio Breast Cancer Symposium being held Dec. 6 — Dec. 10, 2016 in San Antonio, Texas; and the Company's strategic directives under the captions "About EndoPredict" and "About Myriad Genetics." These "forward-looking statements" are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those described or implied in the forward-looking statements. These risks include, but are not limited to: the risk that sales and profit margins of our existing molecular diagnostic tests and pharmaceutical and clinical services may decline or will not continue to increase at historical rates; risks related to our ability to transition from our existing product portfolio to our new tests; risks related to changes in the governmental or private insurers' reimbursement levels for our tests or our ability to obtain reimbursement for our new tests at comparable levels to our existing tests; risks related to increased competition and the development of new competing tests and services; the risk that we may be unable to develop or achieve commercial success for additional molecular diagnostic tests and pharmaceutical and clinical services in a timely manner, or at all; the risk that we may not successfully

develop new markets for our molecular diagnostic tests and pharmaceutical and clinical services, including our ability to successfully generate revenue outside the United States; the risk that licenses to the technology underlying our molecular diagnostic tests and pharmaceutical and clinical services tests and any future tests are terminated or cannot be maintained on satisfactory terms; risks related to delays or other problems with operating our laboratory testing facilities; risks related to public concern over our genetic testing in general or our tests in particular; risks related to regulatory requirements or enforcement in the United States and foreign countries and changes in the structure of the healthcare system or healthcare payment systems; risks related to our ability to obtain new corporate collaborations or licenses and acquire new technologies or businesses on satisfactory terms, if at all; risks related to our ability to successfully integrate and derive benefits from any technologies or businesses that we license or acquire, including but not limited to our acquisition of Assurex, Sividon and the Clinic; risks related to our projections about the potential market opportunity for our products; the risk that we or our licensors may be unable to protect or that third parties will infringe the proprietary technologies underlying our tests; the risk of patent-infringement claims or challenges to the validity of our patents; risks related to changes in intellectual property laws covering our molecular diagnostic tests and pharmaceutical and clinical services and patents or enforcement in the United States and foreign countries, such as the Supreme Court decision in the lawsuit brought against us by the Association for Molecular Pathology et al; risks of new, changing and competitive technologies and regulations in the United States and internationally; the risk that we may be unable to comply with financial operating covenants under our credit or lending agreements; the risk that we will be unable to pay, when due, amounts due under our credit or lending agreements; and other factors discussed under the heading "Risk Factors" contained in Item 1A of our Annual report on Form 10-K for the fiscal year ended June 30, 2016, which has been filed with the Securities and Exchange Commission, as well as any updates to those risk factors filed from time to time in our Quarterly Reports on Form 10-Q or Current Reports on Form 8-K.

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