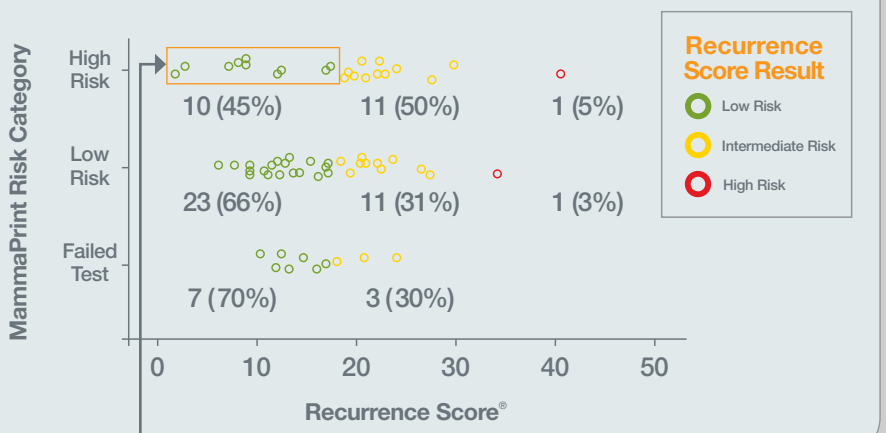
Using MammaPrint® to predict chemotherapy or hormonal therapy benefit puts your patient's outcome at risk

Only the Oncotype DX® Breast Cancer Assay is validated to predict chemotherapy benefit[1,2]

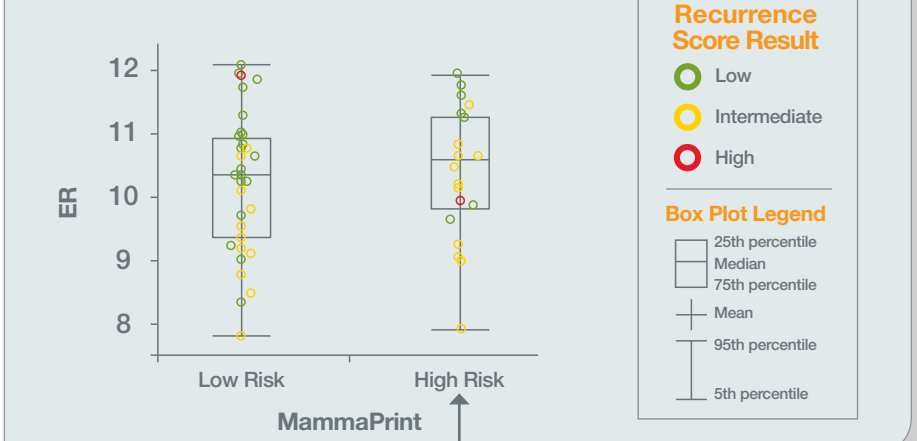
Some patients classified as high-risk by the MammaPrint assay could be over- or undertreated[3,4]

Risk Score Distribution by MammaPrint[3]



- Nearly half of the MammaPrint assay high-risk patients were classified as low-risk by the Oncotype DX assay, indicating minimal, if any, chemotherapy benefit[3]

ER Expression by MammaPrint Risk Category[3]



- MammaPrint high risk patients with low Recurrence Score results and high ER expression would be expected to significantly benefit from hormonal therapy alone[3]

Using the MammaPrint assay to make treatment decisions involving hormone therapy or chemotherapy can lead to mistreatment

oncotype DX® Breast Cancer Assay

Uncover the Unexpected®

Despite what you may hear, the MammaPrint® assay has not been validated to predict hormonal therapy or chemotherapy benefit

Oncotype DX® assay is the only genomic assay validated to predict chemotherapy and hormonal benefit in newly diagnosed, ER-positive, early-stage invasive breast cancer patients receiving tamoxifen

Oncotype DX assay has been validated and confirmed in 4 studies with over 2900 breast cancer patients to provide 10-year risk of distant recurrence and likely chemotherapy benefit[1,2,5,6]

MammaPrint® assay was validated to provide risk assessment of distant recurrence in untreated patients and has not been validated to predict chemotherapy benefit

MammaPrint has been validated and confirmed in 2 studies in 597 patients to provide 5-year risk of distant recurrence[7,8]

Prediction of treatment benefit requires assay validation in cohorts from a randomized clinical trial of a therapeutic intervention. To date, there have been no presented or published results from a randomized clinical trial showing that the MammaPrint result predicts treatment benefit.

Oncotype DX assay is incorporated into NCCN, ASCO, and St Gallen clinical guidelines to predict chemotherapy benefit in patients[9-11]

MammaPrint assay is not incorporated into NCCN, ASCO, or St Gallen clinical guidelines to predict chemotherapy benefit in patients[9-11]

Don't let misinformation negatively impact your ER-positive patients.
Only the Oncotype DX assay is validated to predict chemotherapy benefit.

For more information regarding the Oncotype DX Breast Cancer Assay, please visit www.oncotypeDX.com or contact Customer Service at 866-ONCOTYPE (866-662-6897) in the United States or 001-650-569-2028 outside the US.

References: 1. Paik S, Tang G, Shak S, et al. Gene expression and benefit of chemotherapy in women with node-negative, estrogen receptor-positive breast cancer. *J Clin Oncol.* 2006;24(23):3726-3734. **2.** Albain K, Barlow W, Shak S, et al. Prognostic and predictive value of the 21-gene recurrence score assay in a randomized trial of chemotherapy for postmenopausal, node-positive, estrogen receptor-positive breast cancer. *Lancet Oncol.* 2010;11:55-65. **3.** Poulet B, Jamshidian F, Butler S, et al. Risk classification of early stage breast cancer as assessed by MammaPrint and Oncotype DX genomic assays. Poster presented at: San Antonio Breast Cancer Symposium; December 4-8, 2012; San Antonio, TX. Abstract P6-07-03. **4.** Denduluri N, Rugo H, Davis S, et al. Concordance between 21-gene recurrence score and the 70-gene profile in breast cancer patients. Presented at: 2011 American Society for Clinical Oncology (ASCO) Breast Cancer Symposium; September 8-10, 2011; San Francisco, CA. Abstract 13. **5.** Paik S, Shak S, Tang G, et al. A multigene assay to predict recurrence of tamoxifen-treated, node-negative breast cancer. *N Engl J Med.* 2004;351(27):2817-2826. **6.** Dowsett M, Cuzick J, Wale C, et al. 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):1829-1834. **7.** van de Vijver MJ, He YD, van 't Veer LJ, et al. A gene-expression signature as a predictor of survival in breast cancer. *N Engl J Med.* 2002;347(25):1999-2009. **8.** Buyse M, Loi S, van 't Veer L, et al. Validation and clinical utility of a 70-gene prognostic signature for women with node-negative breast cancer. *J Natl Cancer Inst.* 2006;98(17):1183-1192. **9.** National Comprehensive Cancer Network®. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Breast Cancer (Version 1.2012). www.nccn.org. Accessed March 1, 2013. **10.** Harris L, Fritsche H, Mennel R, et al; American Society of Clinical Oncology. American Society of Clinical Oncology 2007 update of recommendations for the use of tumor markers in breast cancer. *J Clin Oncol.* 2007;25(33):5287-5312. **11.** Goldhirsch A, Wood W, Coates A, et al. Strategies for subtypes—dealing with the diversity of breast cancer: highlights of the St Gallen International Expert Consensus on the Primary Therapy of Early Breast Cancer 2011. *Ann Oncol.* 2011; 22: 1736-1747.

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oncotype DX® Breast Cancer Assay