

# 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.

## Sub-category:

ER+

## Category:

Breast Cancer - HER2/ER

## Meeting:

2011 ASCO Annual Meeting

## Abstract No:

592

## Citation:

J Clin Oncol 29: 2011 (suppl; abstr 592)

**Author(s):** M. Crager, G. Tang, S. Shak; Genomic Health, Redwood City, CA; NSABBP Biostatistical Center and University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA

## Abstract Disclosures

### Abstract:

**Background:** The 21-gene Oncotype DX recurrence score (RS) is widely used for assessment of distant recurrence risk and prediction of chemotherapy benefit in patients with early stage ER-positive breast cancer. The Recurrence Score-Clinical-Pathologic (RSPC) risk assessment tool assesses distant recurrence risk when tamoxifen (TAM) therapy is used without chemotherapy, integrating RS with tumor grade, tumor size, and patient age (Tang et al., J Clin Oncol 28:15s, 2010 [suppl; abstr 509]). Neither RS nor RSPC risk assessment have significant treatment interaction with TAM versus aromatase inhibitor (AI) use. Individualized risk assessment when AI therapy is planned would be desirable.

**Methods:** A recent meta-analysis (Dowsett et al, JCO 2010) compares the relative efficacy of AIs and TAM in reducing the risk of distant recurrence. The AI:TAM hazard ratio from the meta-analysis was combined with 10-year risk of distant recurrence as assessed by RS or RSPC for individual N0, ER+ patients to assess the patient's distant recurrence risk with planned AI therapy.

**Results:** From log rank statistics reported in the AI meta-analysis, we derived a treatment hazard ratio estimate of 0.82 (AI:TAM). Assessments of recurrence risk with AI depend, as expected, on the distant recurrence risk with TAM alone as assessed by RS or RSPC. Confidence interval widths for the AI-alone and TAM-alone risk

assessments did not differ greatly. The estimated absolute benefit of AI relative to TAM for 10-year distant recurrence risk in individual patients ranges from about 1% to about 5%.

**Conclusions:** The AI:TAM meta-analysis hazard ratio estimate can be combined with individual patient's RS and RSPC distant recurrence risk assessment to assess the patient's distant recurrence risk with planned treatment with AI alone.