

## AB009. SOH22ABS142. OncotypeDX<sup>©</sup> use in patients diagnosed with early-stage estrogen receptor positive breast cancer

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**Background:** Estrogen receptor positive (ER+) breast cancer is the most common breast cancer molecular subtype. In recent times, the OncotypeDX<sup>®</sup> Recurrence Score (RS) predicts response to chemoendocrine therapies in early-stage ER+ breast cancers.

Methods: Consecutive female patients diagnosed with ER+, human epidermal growth factor receptor-2 negative, lymph node negative (ER+/HER2-/LN-) breast cancer managed in a single institution between 2005-2015 were included. RS testing was assessed using descriptive statistics. Survival analyses were performed using log-rank Kaplan Meier analyses for disease-free survival (DFS) and overall survival (OS).

**Results:** A total of 358 patients underwent RS testing, with a mean RS 18.6±8.1 (range, 3–59). The mean follow up was 84.1 months. Overall, 85.5% of patients had RS <25 (306/358), of whom 199 received adjuvant chemotherapy (65.0%). Fourteen and a half percent had RS >25 (52/358) and 44 received adjuvant chemotherapy (84.6%, 44/52). RS group (RS <25 versus RS >25) failed to predict DFS or OS in this cohort (P=0.458). Receiving adjuvant chemotherapy failed to enhance DFS for those with RS <25 (P=0.588) and for those with RS >25 (P=0.438). Furthermore, receiving

adjuvant chemotherapy failed to enhance OS for those with RS <25 (P=0.588) and for those with RS >25 (P=0.438). All patients received adjuvant endocrine therapy (100%, 358/358).

**Conclusions:** RS testing is useful in predicting those who will benefit from chemoendocrine therapy in early-stage ER+/HER2-/LN-. Patient substratification is crucial to personalise treatment specific to each patient.

Keywords: Breast; cancer; estrogen; oncotype; score

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## **Footnote**

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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