Poster Abstracts II

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Goals: This work summarizes the experience of Maccabi Healthcare Services (MHS; the 2nd largest HMO in Israel) with Oncotype DX® (ODX) testing in early breast cancer and the association of the Recurrence Score (RS; the ODX result) with treatment decisions and clinical outcomes.

Methods: The MHS eligibility criteria for ODX testing are: ER+ N0/pN1mic tumors, discussion of test implications with an oncologist, ductal carcinoma 0.6–1.0 cm with grade 2–3 histology, or HER2? ductal carcinoma 1.1–4.0 cm with grade 1–2 histology, or lobular carcinoma. Large (?1.0 cm) grade 3 tumors could have grade reassessed. We linked up RS results to information on pts' demographics, treatments, and clinical outcomes extracted from the MHS database. Chi-squared test/Fisher exact test were used to study the association between RS, clinicopathologic characteristics, and treatments received.

Results: In the 1/2008–12/2011 timeframe, 751 MHS pts underwent ODX testing, of whom 713 met the MHS criteria; 59%, 33% and 8% of pts had low, intermediate, and high RS, respectively. RS distribution varied significantly by age (P = 0.0458); high RS was more common in younger than older pts (13% vs 6% in pts aged 18–44 and ≥65 yrs, respectively). In MHS-eligible pts, RS distribution varied by histology and grade. High RS was more common in IDC than ILC/mixed histology (8% vs 2%; P = 0.0187 for comparing RS distributions). When reviewing IDC tumors by grade and size (per the MHS policy), high RS was common even in small (?1 cm) grade 3 tumors and was rare in large (1.1–4.0 cm) grade 1 tumors (32% vs 3%; P < 0.0001). Analysis of the 392 pts that had Ki-67 data revealed a weak (r = 0.32) positive correlation between Ki-67 levels and RS results (P < 0.0001). Chemotherapy was administered to 2%, 18%, and 66% of pts with low, intermediate, and high RS, respectively (P < 0.0001). For intermediate RS pts, older age was significantly associated with decreased chemotherapy use (47%, 14%, and 5% of pts aged 18–44, 45–64, and ≥65 yrs received chemotherapy, respectively; P < 0.0001). With a median follow up of 26 months, no systemic recurrences were documented; 1 pt had local recurrence.

Conclusion: Our results demonstrate that even in this seemingly low-risk population, a considerable proportion of pts (41%) had intermediate/high RS. In patients with intermediate RS, older age was significantly associated with decreased chemotherapy use. No significant relationships.