Effect of 21-Gene Recurrence Score Results on Treatment Recommendations in Patients Ages 65 and Older with Lymph Node-Positive, Estrogen Receptor-Positive Breast Cancer

Authors: Oratz R,[1] Chao C,[2] Skrzypczak S,[2] Ory C,[3] Broder M[3]

Institutions:
[1] Division of Medical Oncology, Department of Medicine, New York University School of Medicine, New York, NY
[2] Genomic Health, Inc., Redwood City, CA
[3] Partnership for Health Analytic Research, Beverly Hills, CA

Results of recent Onco*type* DX® studies indicate that the Recurrence Score (RS) can identify patients with node-positive, estrogen receptor-positive (N+/ER+) breast cancer who may not benefit from chemotherapy. We performed a survey to characterize the effect of the Onco*type* DX® assay on adjuvant treatment recommendations in N+/ER+ breast cancer.

U.S. medical oncologists who ordered Onco*type* DX® for at least 1 patient with N+/ER+ breast cancer were asked to complete a web-based survey regarding the most recent N+/ER+ patient for whom the Oncotype DX® assay was ordered. The survey was developed through cognitive interviews with medical oncologists, and an institutional review board approved the protocol.

There were 160 completed surveys; this analysis focuses on the 59 surveys in which the patient was ≥ 65 years old. Most physician respondents were in community practices (76%), and they had a median of 9 years (range: 3–45) of practice experience. The median patient age was 71 years (range: 65–82). T1, T2, or T3 disease was reported in 58%, 39%, and 3% of patients, respectively. One, two, three, or 4+ nodes were reported in 58%, 31%, 7%, and 3%, respectively (unknown in 1 patient). Sixty-three percent of N+/ER+ patients had an RS <18; 31% had an RS of 18–30; and 7% had an RS ≥31. Before obtaining the RS, oncologists had a treatment recommendation for 51 of the 59 patients: chemotherapy was planned in 27/59 (46%), endocrine therapy in 23/59 (39%), and other treatment for 1/59 (2%). After obtaining the RS, chemotherapy was eliminated in 23/51 patients (45%) and added in 7/51 (14%), for a 31% net reduction in chemotherapy.

For patients aged 65 and older with N+/ER+ breast cancer, the RS is used more often (but not exclusively) in patients with 1–2 positive nodes and T1 or T2 stage disease. Treatment recommendations for these patients were frequently changed by the RS, with an overall reduction in the recommendation for chemotherapy, a change that may result in more cost effective care.