Prospective multi-center study of the impact of the 21-gene recurrence score assay on patient satisfaction, anxiety and decisional conflict for adjuvant breast cancer treatment selection

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Background: Use of the Oncotype DX Recurrence Score assay (RS) in a prospective, multi-institutional study resulted in a change in medical oncologist (MO) adjuvant treatment recommendation in 31.5% (n=28) of cases; the most common change was from chemo/hormonal therapy (CHT) to hormone therapy (HT) (Lo et al., ASCO 2007). This new report analyzes the patient (pt) portion of the study, with objectives to determine the impact of the RS on pts treatment decision-making and anxiety level before and after the test.

Material and Methods: Patients at 1 community and 3 academic centers completed 3 questionnaires pre- and post-RS: 1) the Patient Treatment Decision Making Questionnaire; 2) the Decisional Conflict Scale (DCS); and 3) the State-Trait Anxiety Inventory. Frequency distributions, means and standard deviations were used to summarize data. Paired samples t-tests assessed anxiety, satisfaction, and decisional conflict pre- and post-RS.

Results: Accrual goal was met with 89 evaluable pts. 95% (n=81) of pts were glad they took the test, and 83% (n=89) reported the assay influenced their treatment choice. 26.8% (n=24) of pts had a change in treatment plan post-RS, with 10.1% (n=9) changing from pre-test CHT to post-test HT. Results from the DCS indicate reduced conflict over treatment decision post-RS (p <.0001), greater pt satisfaction, and increased confidence with choice of adjuvant therapy (p <.0001). State anxiety was also reduced post-RS (p = 0.01).

Discussion: Results of the RS changed both MOs and pts decisions regarding adjuvant therapy. Use of the assay resulted in less chemotherapy use, decreased pt anxiety and increased pt confidence regarding adjuvant treatment decisions.