

P196 Results from a prospective clinical study on the impact of Oncotype DX on adjuvant treatment decision and risk classification by Nottingham prognostic index (NPI) and recurrence score (RS)

Predictive and prognostic factors

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Goals: The NPI is a decision aid for adjuvant breast cancer treatment used in the UK. International guidelines support the use of Oncotype DX to provide additional prognostic and predictive information in early breast cancer but experience in the UK is limited. In our prospective study we evaluate this test for the NHS and its impact on treatment recommendations by UK oncologists.

Methods: Patients with ER+, pN0 or pN1mic early breast cancer who have no contraindication to adjuvant chemotherapy (CT) are eligible. Adjuvant treatment recommendations of oncologists are assessed before and after testing with Oncotype DX. Risk assessment was also performed using NPI.

Results: Analysis is based on the first 75 patients with results available for 74. According to NPI 5 patients (6.8%) had excellent, 33 (44.6%) good, 35 (47.3%) moderate and 1 (1.4%) poor prognosis. According to the RS risk categories 41 women (55.4%) were in the low, 22 (29.7%) in the intermediate and 11 (14.9%) in the high risk group. Of the 35 patients with moderate risk as per NPI 19 (54.3%) had low risk, 8 (22.9%) intermediate and 8 (22.9%) high risk by RS. Initial treatment recommendations changed in 28 (37.8%) cases. In 22 patients treatment recommendations changed from HT+CT to HT and in 6 from HT to HT+CT. Treatment recommendations were changed in 27 (65.9%) patients with low, in 6 (27.3%) with intermediate and in 2 (18.2%) with high RS. CT+HT was recommended for 7.3% of low RS, 59.1% of intermediate and 90.9% of high RS patients. Overall, there was a reduction in recommendations for CT from 56.8% to 35.1% ($p = 0.004$).

Conclusion: Early results of our study suggest that Oncotype DX is applicable and feasible to perform in UK patients with a reduction in the use of adjuvant chemotherapy consistent with findings of reported studies. RS added prognostic information beyond information provided by NPI.