Goals: Adjuvant treatment traditions in ER+ early breast cancer vary considerably across countries. The Oncotype DX® Recurrence Score® is a validated assay to help inform the appropriate treatment in this patient population. This is a pooled-analysis of 4 prospective European studies assessing the impact of the Recurrence Score results on adjuvant treatment decisions.

Methods: A pooled analysis was performed of the prospective decision impact studies in France, Germany, Spain and the UK. The studies had a similar design, enrolling consecutive patients and recording treatment recommendations before and after knowing the Recurrence Score result. Results from the individual studies have been presented/published. Only node negative patients were included in this analysis.

Results: Treatment recommendations were available for 527 patients. Overall, 45% (range 36–52%) of patients in these studies were recommended chemo-endocrine and 55% endocrine treatment alone prior to having the Recurrence Score result. After knowing the Recurrence Score result, 31.9% (95% CI: 27.9–35.9%) of patients had a treatment recommendation change. 48% of patients originally recommended chemo-endocrine were changed to endocrine treatment alone and 18% of patients originally recommended endocrine treatment alone were changed to chemo-endocrine therapy. There was an overall reduction in the recommendation of chemotherapy from 45.4% to 33.6%. There was less heterogeneity in treatment decisions between the individual studies after including the Recurrence Score result. Clinically relevant treatment decision changes were observed in all Recurrence Score categories, grades (I–III), age groups (<55, ≥55) and tumor sizes (<2, >2 cm). In all evaluated studies, knowing the Recurrence Score result was associated with a significant improvement in physicians' confidence regarding treatment recommendations (P < 0.01).

Conclusion: Knowing the Recurrence Score results has a significant impact on treatment recommendations with an overall reduction in chemotherapy use. The consistency of the results from different countries underlines the utility of the Recurrence Score. All 4 studies were supported by Genomic Health, Inc. The development of the abstract was supported by Genomic Health, Inc.