BREAST CANCER Genetic signature trumps clinicopathological features

Many women treated with adjuvant chemotherapy for breast cancer do not derive significant benefit. Several genomic classifiers, such as MammaPrint[®], have been developed to improve prognostic accuracy. A prospective study by Sabine Linn *et al.* has shown that MammaPrint improves prognostic accuracy over traditional clinicopathological features in the clinical setting. Linn explains, "we wanted to know whether it was feasible to use the MammaPrint test in community hospitals in the Netherlands, and whether its prognostic value would be retained when used prospectively."

The researchers chose an observational approach as it allowed them to study the use of the MammaPrint test in daily clinical practice. A substantial portion of patients with low-risk disease based on the MammaPrint result did not receive chemotherapy even though AdjuvantOnline! clinicopathological risk estimations indicated therapy. "Compared to AdjuvantOnline! risk estimations (with high risk defined as <90% 10-year survival), 20% fewer patients were labelled high risk according to MammaPrint," points out Linn. Moreover, 70 patients deemed high risk by AdjuvantOnline!, but low risk by MammaPrint and who had not received any systemic therapy had a 100% distant-recurrence free interval probability at 60 months of follow-up.

Linn highlights the practice-changing implications of this trial, "while awaiting the results of the MINDACT trial, we already use the MammaPrint test in cases where there is doubt about the additional benefit of adjuvant chemotherapy. This practice is according to the most recent Dutch national guidelines."

Lisa Hutchinson

Original article Drukker, C. A. *et al*. A prospective evaluation of a breast cancer prognosis signature in the observational RASTER study. *Int. J. Cancer* doi:10.1002/ijc.28082