In breast cancer patients the level of expression of estrogen receptor (ER), progesterone receptor (PR) and HER2 have been investigated for diagnostic purposes and in the context of clinical decision making [1]. For each receptor, in situ hybridization (FISH) assessments generated in various hospitals [2] and resulted in 67, 61 and 39 percent positive samples for ER, PR and HER2, respectively. Concordance between central IHC and microarray was high for ER (93%, 95%CI: 91% to 95%) and moderately high for PR (83%, 95%CI: 80% to 86%) [1]. 

Concordance classifications showed a higher survival rate for patients who were classified as hormone receptor (HR) positive (ER or PR positive) compared to those who were HR negative (P=0.001). Similarly, a lower survival rate was observed for patients who were classified as HER2 positive by both IHC and TargetPrint compared to those who were HER2 negative (P=0.001). For discordant samples between IHC and TargetPrint, microarray based assessment was in better agreement with the concordant classification: HR microarray-negative/HER2 positive showed a poor survival rate and HR microarray-positive/HER2 negative showed a good survival rate, whereas HER2 microarray-negative/PR-positive showed a poor survival rate and microarray-negative/HER2-negative samples showed poorer survival.

**References**


2. Roepman P, et al. Microarray-based determination of ER, PR and HER2 receptor status: validation and comparison with IHC assessments. Microarray-based determination of ER, PR and HER2 receptor status: validation and comparison with IHC assessments.