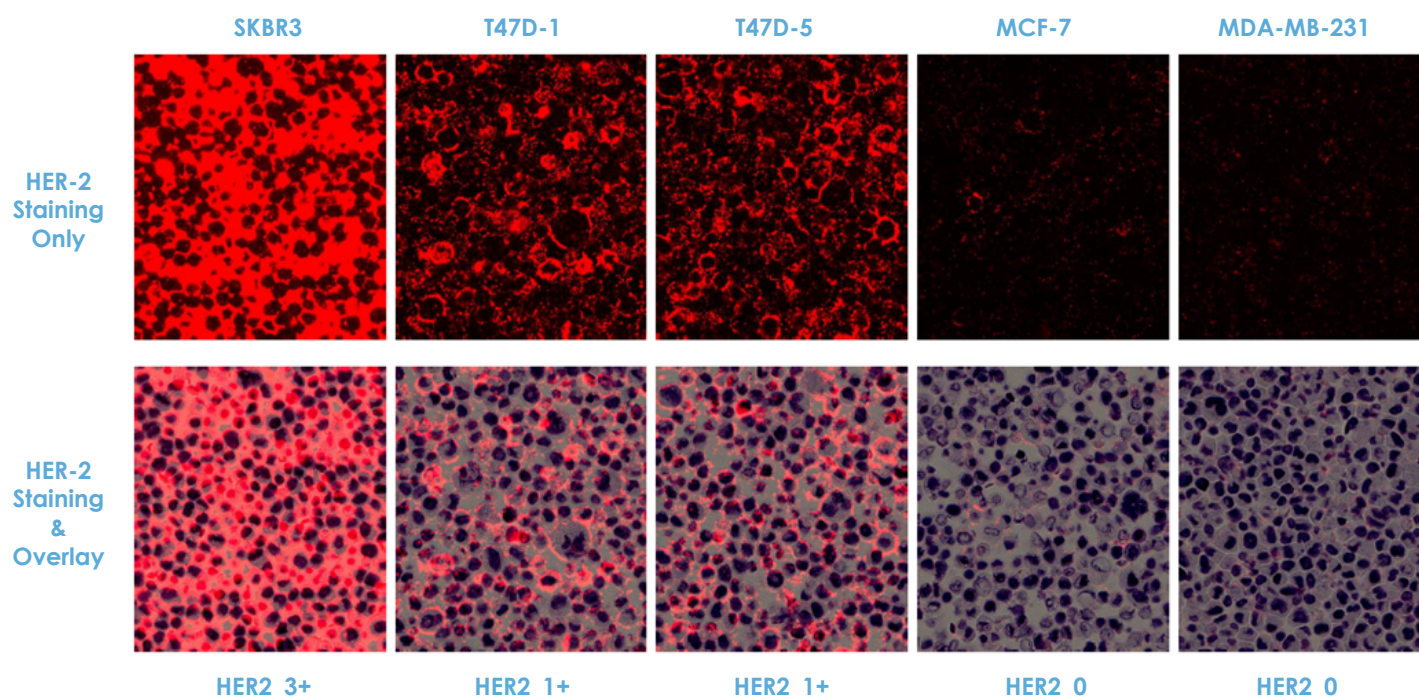


Advanced Low HER-2 Tissue Testing using Quanticell™

Increased Sensitivity for Tumor Profiling Without Enzymatic Amplification

Quanticell is a highly sensitive, quantitative tissue biomarker testing service that detects proteins using photostable, highly bright phosphor-integrated dots (PIDs) developed by Konica Minolta. This novel nanoparticle-based detection technology addresses the limitations observed with standard chromogenic and fluorescent-based assays, such as saturation, non-linearity and high background signal. Quanticell can be used to profile the complex biology of tumors and their respective microenvironments to help develop effective molecular-targeted therapies for breast cancer, such as Bispecifics, Antibody-Drug Conjugates and Checkpoint Inhibitors.



Evaluating HER-2 Staining using Quanticell. HER-2 (clone 4B5, Ventana) immunostaining was performed on well-characterized Cell Line-Derived Xenograft tumor models. Staining was done on sections with varying levels of HER-2 expression from negative (MDA-MB-231) to high (SKBR3). The PID-based staining results revealed positive signal detected in tumor models previously determined negative using the DAB-based scoring approach.

ADVANTAGES

- **Visualize and quantitate** low expressing antigens across a broad dynamic range without the need for signal amplification
- **Multiplex** tumor-specific, immune, and/or functional markers for spatial phenotyping on single slide section
- **Detect and measure** drug distribution alongside the drug target using Drug Sensitivity Tissue Testing (DSTT)
- **Evaluate drug pharmacodynamics (PD)** biomarkers in the tissue context and build predictive response profiles