



MAMMATYPER[®]

Innovation for your breast cancer diagnostics

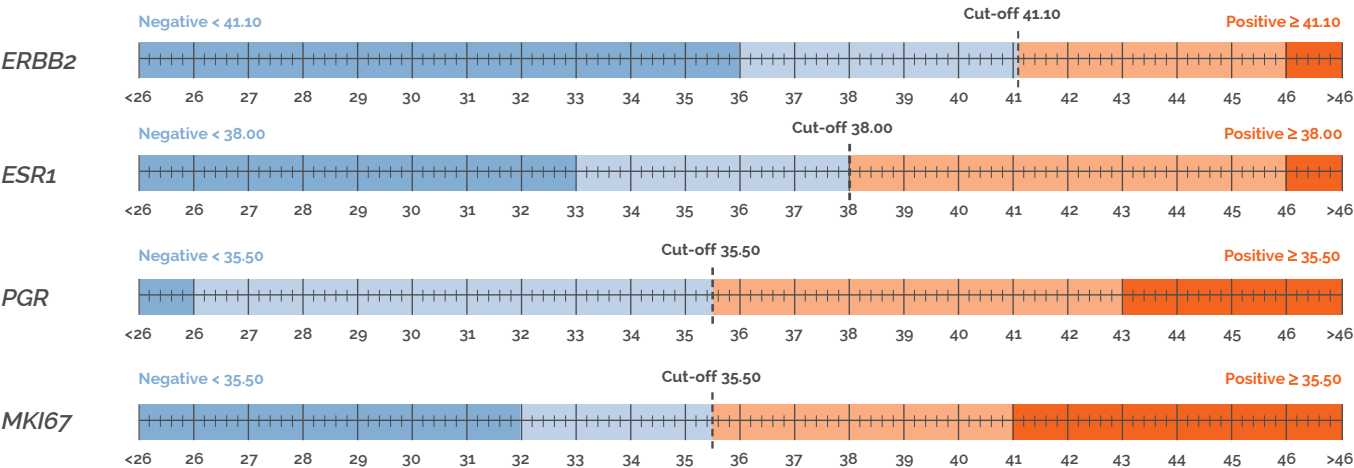
Key Characteristics:





MammaTyper® delivers precise quantitative results for each biomarker

- 1. MammaTyper® result: Quantitative values (40-ΔΔCq) per marker
- 2. Each marker is classified as positive or negative according to validated cut-off values:



Values in the ranges coloured in light blue/orange have been observed in a cohort of 765 breast cancer samples. Values in the ranges coloured in dark blue/orange have not yet been observed (clinical thresholds shown for Roche LightCycler® 480 instrument II; Cut-offs validated in the FinHer trial with 765 breast cancer samples).

- 3. The combination of marker results reveal the **St Gallen subtypes**: Luminal A-like, Luminal B-like (HER2 negative), Luminal B-like (HER2 positive), HER2 positive (non-luminal) and Triple negative tumors

Prognosis and therapy decision is based on the subtype and other clinico-pathological factors

ERBB2	ESR1	PGR	MKI67	St Gallen Subtype¹
pos	pos	pos	pos	Luminal B-like (HER2 positive)
pos	pos	pos	neg	Luminal B-like (HER2 positive)
pos	pos	neg	pos	Luminal B-like (HER2 positive)
pos	pos	neg	neg	Luminal B-like (HER2 positive)
pos	neg	pos	pos	Not defined¹
pos	neg	pos	neg	Not defined¹
pos	neg	neg	pos	HER2 positive (non-luminal)
pos	neg	neg	neg	HER2 positive (non-luminal)

ERBB2	ESR1	PGR	MKI67	St Gallen Subtype¹
neg	pos	pos	pos	Luminal B-like (HER2 negative)
neg	pos	pos	neg	Luminal A-like
neg	pos	neg	pos	Luminal B-like (HER2 negative)
neg	pos	neg	neg	Luminal B-like (HER2 negative)
neg	neg	pos	pos	Not defined¹
neg	neg	pos	neg	Not defined¹
neg	neg	neg	pos	Triple negative (ductal)
neg	neg	neg	neg	Triple negative (ductal)

1) Subtype definition according to 13th St Gallen guidelines (Goldhirsch et al. 2013). The 'not defined' subtypes according to St Gallen (2013) are based on the assumption that a combination showing an ER negative but a PR positive result is not possible. In an epidemiological inquiry 2.4% ER negative/PR positive tumors have been found in an American breast cancer cohort (Ries et al. 2007). These subtypes were also found in two MammaTyper® clinical performance evaluation studies in some cases (3.5%).