



Cerba Research

Supporting your Breast Cancer Research

Breast cancer is one of the most complex and heterogeneous malignancies, with diverse molecular subtypes requiring distinct therapeutic strategies – from hormone receptor-positive to HER2-positive and triple-negative disease.

To successfully develop targeted therapies in this landscape, you need precise, reliable biomarker insights at every stage of development.

That means working with a laboratory partner who can deliver accurate testing, scalable solutions, and consistent results across global studies.

Our specialists support the full spectrum of breast cancer research, from early discovery through phase III registration trials, combining advanced testing capabilities with deep regulatory expertise.

Our Experience in the Breast Cancer Landscape



638 NGS broad-panel assay with our OncoSign 600+



50 Genes with OncoSign ctDNA panel



250+ Histopathology analysis with markers such as ER, PR, HER2 run in CLIA accredited laboratories



3 Techniques for HER2 IHC: HercepTest, HER2-NEU, HER2-CISH

Biomarkers in Breast Cancer

Breast cancer research depends on the accurate detection and interpretation of key biomarkers, including ER, PR, HER2, and emerging targets such as PIK3CA.

To support effective trial design and patient stratification, you need testing solutions that are:

- Validated and reproducible
- Adaptable across development phases
- Scalable for global studies.

Our integrated approach combines IHC, NGS, PCR, and FISH technologies to deliver reliable, high-quality biomarker data throughout your clinical program.

Breast Cancer Biomarkers	Most Commonly Deployed*	Cerba Research NGS†	Cerba Research IHC***	Cerba Research FISH†
HER2	IHC	✓	✓	✓
ER	IHC		✓	
PR	IHC		✓	
PD-L1	IHC (22C3 Ab)		✓ (clones, 22C3, SP142, SP263, multiplexed)	
Ki67	IHC		✓	
PIK3CA	NGS, PCR, liquid biopsy	✓		
NTRK fusions	NGS, FISH, PCR	✓		✓
TMB-H	NGS	✓		
MSI-H/dMMR	NGS, IHC, PCR	✓	✓	
BRCA1/ BRCA2	Germline sequencing	✓		
RET fusions	NGS	✓	✓	
ESR1	NGS, PCR	✓		

Explore our full oncology capabilities

*NCCN 2025;

†Cerba Research Data In-house mostly available through the ACTOnco®/Cerba France/ Cerba US NGS panels or CR Montpellier (IHC) or Cerba France (FISH);

** Validation levels of biomarkers may vary depending on intended use; TMB-H=tumor mutational burden-high; MSI-H=microsatellite instability-high; dMMR= mismatch repair deficient; IHC=immunohistochemistry; NGS=next-generation sequencing; FISH=fluorescence in situ hybridization; PCR=polymerase chain reaction; ESR1=estrogen receptor 1; ISH=in situ hybridization