

KNOW MORE

BIOMARKER	WHEN IS IT TESTED?	WHY IS IT TESTED?
Estrogen receptor (ER)	When a person receives a breast cancer diagnosis as part of their biopsy.	Tumors positive for ER can be treated with hormone therapy.
Progesterone receptor (PR)	When a person receives a breast cancer diagnosis as part of their biopsy.	Tumors positive for PR can be treated with hormone therapy.
Human epidermal growth factor receptor 2 (HER2)	When a person receives a breast cancer diagnosis as part of their biopsy.	Tumors positive for HER2 can be treated with HER2-targeted therapies.
Ki67	Sometimes tested when a person receives a breast cancer diagnosis as part of their biopsy.	Ki67 measures how quickly a tumor is growing and it can indicate a person's prognosis.
PD-L1	When diagnosed with metastatic triple negative breast cancer.	Metastatic triple negative breast cancers positive for PD-L1 can be treated with the immunotherapy drug pembrolizumab (Keytruda).
Inherited <i>BRCA1/2</i> mutations	People diagnosed with breast cancer may receive genetic testing for <i>BRCA1/2</i> mutations if they meet the criteria in the table here .	Some people that carry <i>BRCA1/2</i> mutations can be treated with PARP inhibitors. Carrying these or other inherited mutations can also guide your options for surgery.
<i>ESR1</i> mutations	People diagnosed with metastatic hormone receptor-positive breast cancer. Testing can occur multiple times throughout the course of treatment for metastatic breast cancer.	Metastatic hormone receptor-positive breast cancers that have <i>ESR1</i> mutations can be treated with elacestrant (Orserdu).
<i>PIK3CA</i>, <i>AKT1</i> and <i>PTEN</i> mutations	People diagnosed with metastatic hormone receptor-positive breast cancer.	Metastatic hormone receptor-positive breast cancers that have PIK3CA mutations can be treated with alpelisib (Piqray) or inavolisib (Itovebi). Those with <i>PIK3CA</i> , <i>AKT1</i> or <i>PTEN</i> mutations can be treated with capivasertib (Truqap).
Cancer antigen 27.29 (CA27.29) and Cancer antigen 15-3 (CA15-3)	When monitoring metastatic breast cancer.	Levels of these biomarkers in the blood can help indicate if a tumor is responding to a treatment or spreading.